

PCreview

Which 486?

**Don't buy a new PC
until you read this!**

**Over
25 games
reviewed!**

Elite 2

**Blast beyond the
final Frontier in our
EXCLUSIVE full
review!**

Make it easy

- DOS 6 tips and tactics
- CD-ROM drives explained

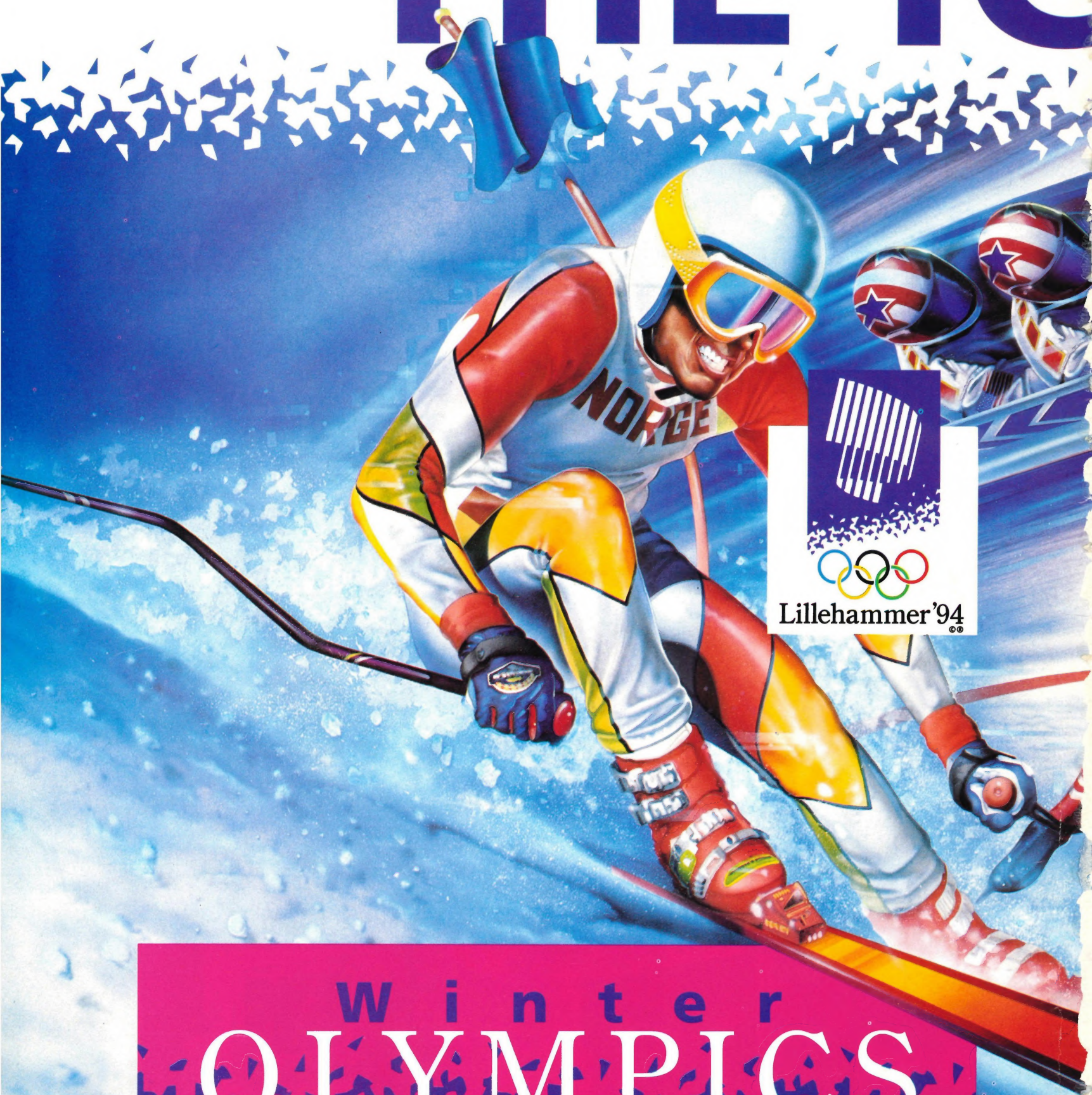
WIN this Unica 486 PC!
Details inside



**TWO HIGH DENSITY
DISKS WITH THIS ISSUE**



THE IC



Lillehammer '94

W i n t e r OLYMPICS

This Winter's hottest game.

THE AGE



Hot on the heels of one monster hit comes another...

If you thought the Jurassic dinosaurs had bite, just wait 'til you clamp on your skis and tackle the biggest, blackest slopes on the mountain.

Winter Olympics is the most heart-pounding, knee-trembling sports sim you've ever had the courage to face.

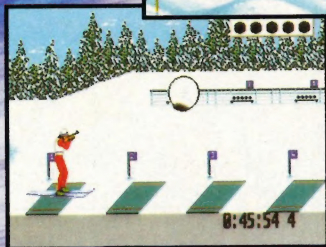
And it's going to wipe out everything in its path. You're up against the world's greatest winter sportsmen in a race of mammoth speeds. Competing in ten spectacular snow-capped events, you'll need every last ounce of strength, skill and staying power to beat the rest and tame the piste.

Breathe deep...muster your reserves... focus yourself ... then **GO GO GO FOR GOLD!**

Just remember one thing: never look back. Winter Olympics. It's hot.

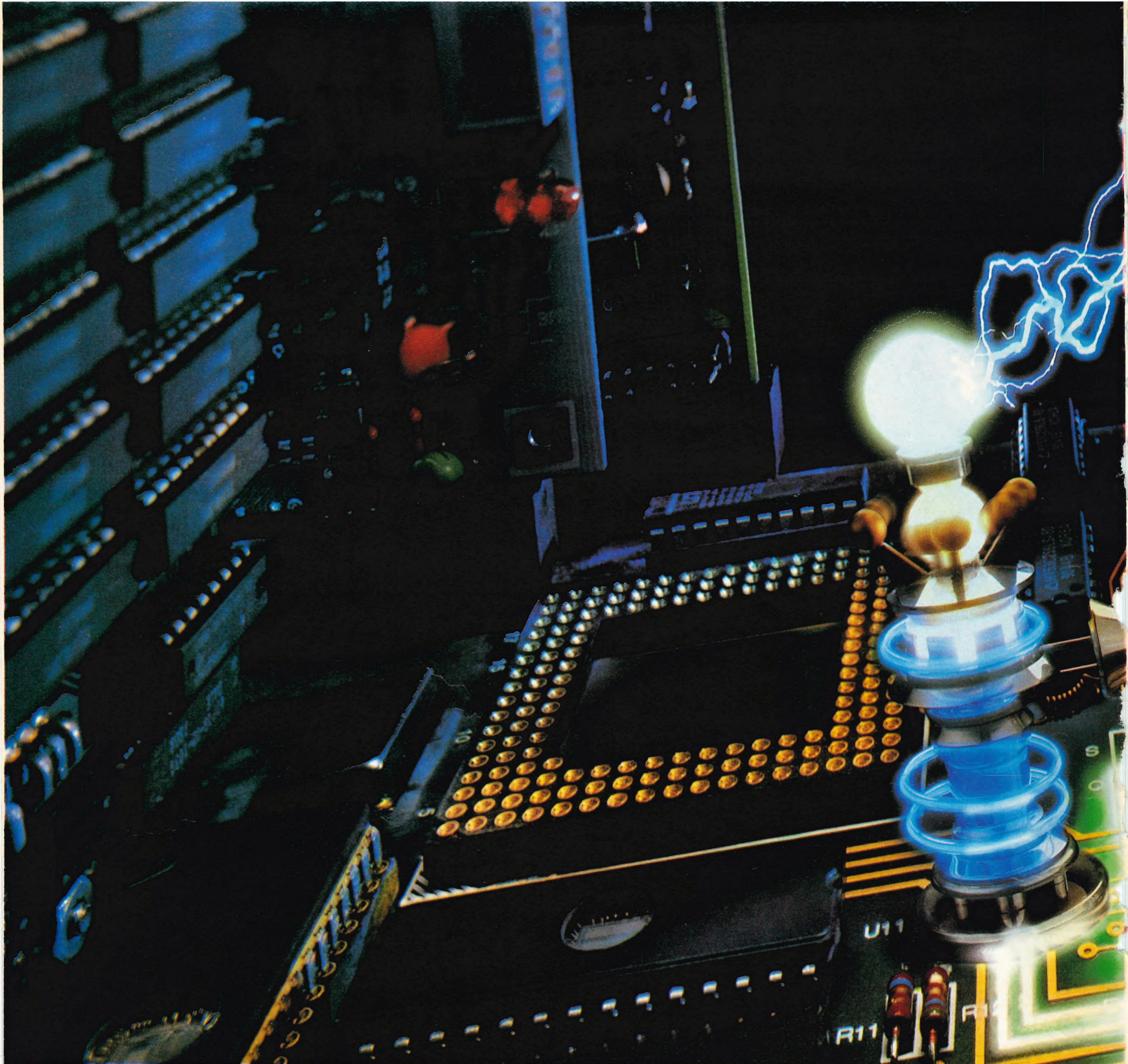


AVAILABLE ON:
SEGA MEGA DRIVE,
MASTER SYSTEM, GAME GEAR,
NINTENDO S.NES, AMIGA, PC
AND PC CD-ROM.



Screen shots from a selection of available formats (see above)





The affordable power source in

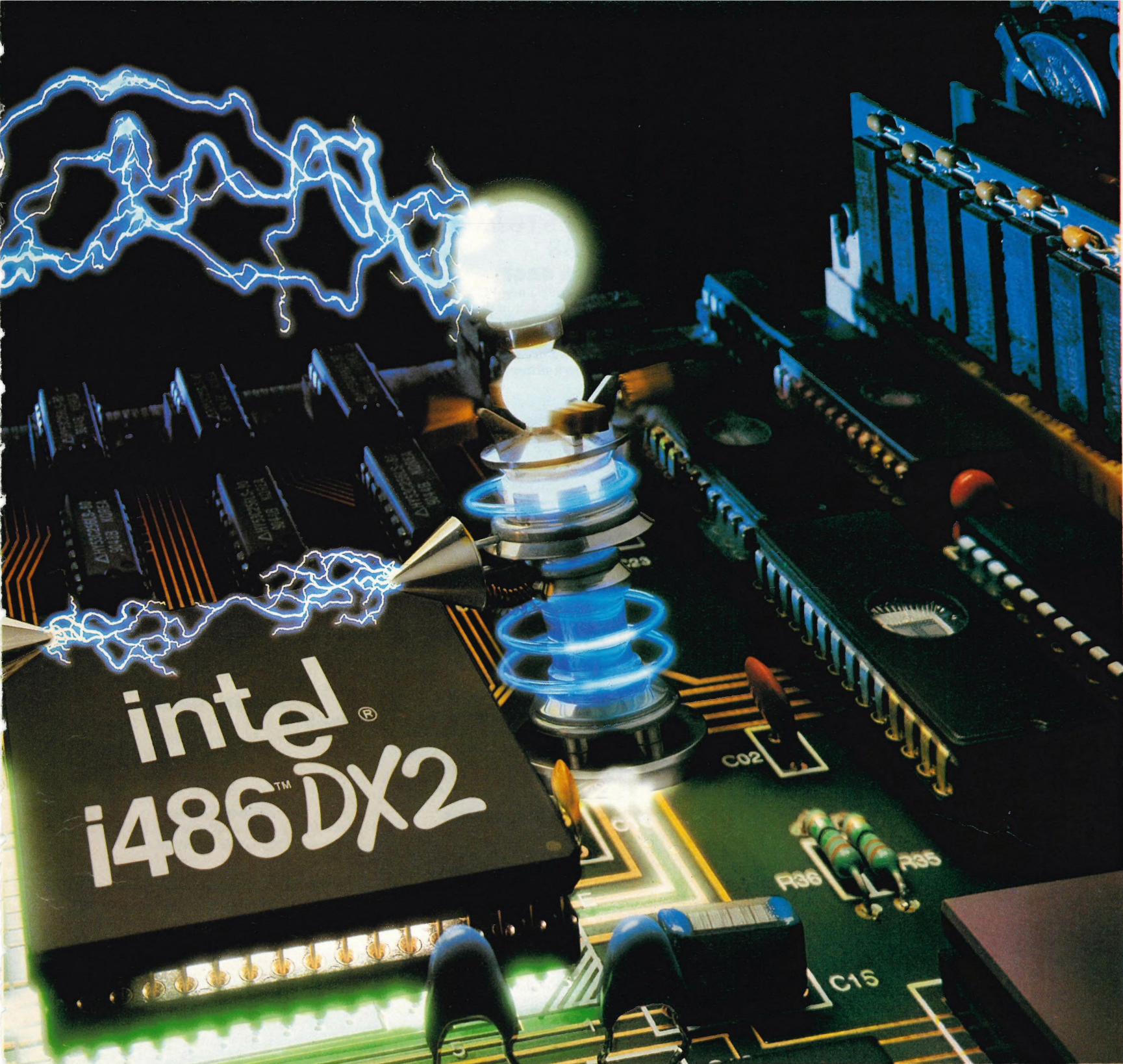


Today's user friendly software demands a lot of power. Power that Intel's 486 DX2 microprocessor can provide.

Whereas other systems slow down running 3D and enhanced graphics, the Intel486 DX2 is able to

cope with ease. By using Intel's latest speed doubling technology.

Of course, it guarantees compatibility, as all of today's most popular software is designed to run on Intel microprocessors. It also generates enough power



your PC to run today's games.

to cope with the next generation of demanding software.

Performance, compatibility and room for the future - three powerful reasons to buy a PC with an Intel486 DX2 inside.

For more information, simply post the coupon.

To: Intel Corporation, Customer Support Centre, Pipers Way, Swindon, Wilts, SN3 1RJ. Please send me further information on Intel486 DX2 processors.

DX32

Name

Company

Address

Postcode

Country

intel®



ISSUE 26

Published by EMAP Images, Priory Court,
30-32 Farringdon Lane, London EC1R 3AU
Tel: (071) 972 6700 Fax: (071) 972 6710
E-mail: pcreview@CIX.compulink.co.uk

All subscriptions and back issues inquiries
should be directed to Tower Publishing on
(0858) 468811

EDITORIAL

Editor Christina Erskine
Deputy editor John Bennett
Production editor Paula Shields
Staff writers Dean Evans, Cal Jones
Contributors Chris Anderson, Ciarán
Brennan, Steve Cooke, Gordon
Houghton, Mike James, Andy Johnson,
Sam Mackenzie, Robin Matthews,
Gail Robinson, Simon Shaw,
Dudley Wheeler

DESIGN

Art editors Mark Edwards, Becky Willis
Illustration Geoff Fowler
Cover photography Terrence Beddis
Model by Lee Graber

ADVERTISING

Group advertisement manager
Nigel Taylor
Deputy advertisement manager
Melanie Costin
Advertising production Tina Gynn

MANAGEMENT

Publishing director Mike Frey
Marketing director Marcus Rich
Marketing manager Karen Williams
Product manager Sarah Ewing
Marketing assistant Fiona Malloch
Managing director Terry Pratt

PC REVIEW EUROPE

European production manager
Paul Boughton
Production editor Alan Dykes

Page output and colour origination by Team Graphics, 105-109
Oxford Street, W1. Printed by Passmore International, 17-21
Hovefields Avenue, Burnt Mills Industrial Estate, Basildon, Essex.
Distributed by BBC Frontline.
© EMAP Images 1993. No part of this magazine may be repro-
duced, stored in a retrieval system or transmitted in any form
(either electronic or mechanical) without the express written
consent of the publisher.

PC Review does its best to ensure that the information
carried in the magazine is accurate, but cannot be held
responsible for any errors which occur.

SUBSCRIPTION RATES
12 issues United Kingdom £40.00
12 issues Europe (airmail) £48.00

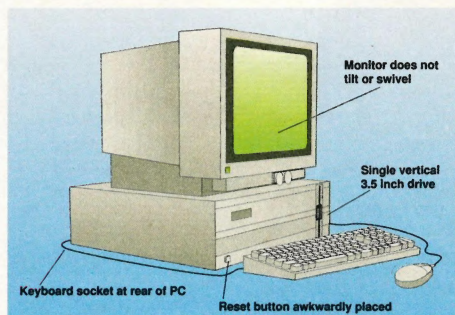
CONTENTS

COVER STORY

38

Which 486?

If you're thinking of buying a new PC, read this
definitive guide before you set foot in the shop. Dean
Evans and John Bennett explain how to identify
which PC you need, how to safeguard your purchase,
and road-test six 486-based machines to see which
ones meet PC Review's stringent standards.



FEATURES

46

DOS 6 tips and tactics

Having trouble setting up DOS 6? Gail Robinson
has some nifty hints for making your software and
DOS 6 get along a whole lot better.

51

Facts at your fingertips

CD encyclopaedias should be interesting, enlighten-
ing, and packed with everything you ever wanted to
know. Christina Erskine puts four contenders
through their paces.

60

Inside the PC

So just how does that shiny CD-ROM work? How
can it store a whole 600Mb of data? We explain all
in our easy to follow CD-ROM drive tour.

120

Competition

Win a unique prize: a gold CD version of Psygnosis's
Microcosm, the all-action game involving a journey
through the human body.

158

Classic space games

With the release of Frontier: Elite 2, Dean Evans
looks at the pretenders to Elite's claim to be the king
of space trading.

PREVIEWS

32

Inca 2

More weird and wonderful space opera from Coktel
Vision. Cal Jones reports.



34

Submarine games

Software houses are vying for control of the deep this
Christmas with three underwater simulations close
to completion. Dean Evans assesses their chances.

SHAREWARE

130

The latest shareware and public domain programs.

QED

136

Harrier AV8B

Dudley Wheeler shows you how to get the most out
of Domark's seminal flight sim.

140

Blue Force

How to survive your first day on the beat in
Tsunami's adventure.

*Note to readers who have been following our
Rise of the Robots series: the final part will
appear in next month's PC Review*

REGULARS

18 **News**

23 **The Cooke report**

Opinions and informed comment
from Steve Cooke.

25 **Ciarán Brennan**

Is CD-ROM all it's cracked up to be?

126 **PC Review Recommended**

Your chance to win our Recommended
games, plus the Virgin charts, and some PC
miscellany.

145 **Q&A**

Mike James answers your technical queries.

151 **Letters**

155 **Back issues**

162 **Classic Game
of the Month**

David Braben nominates his pick of the PC
crop.

64 Frontier: Elite 2

Gametek

72 Kasparov's Gambit

Electronic Arts

76 Privateer

Origin Systems

82 Return to Zork

Activision

92 Dark Sun

SSI/US Gold

96 SimFarm

Maxis

98 Patriot

Electronic Arts

100 The Blue and the Gray

Impressions

102 Strike Commander:

Tactical Operations

Origin Systems

104 Kingmaker

US Gold

107 Global Domination

Impressions

111 V For Victory 4:

Gold Juno Sword

Three Sixty/Electronic Arts

112 Dino Dini's Goal!

Virgin Interactive

115 Eight Ball Deluxe

Supervision

BUDGET REVIEWS

123-124

Chuck Yeager

Hit Squad

Hook

Hit Squad

Steel Thunder

Hit Squad

Magic Candle II

Hit Squad

Links

Kixx XL

Night Shift

Kixx XL



28
COMPETITION
Win a Unica 486 PC
with built-in CD-ROM
drive

COVER DISKS



PAGE 8

CONTRIBUTORS



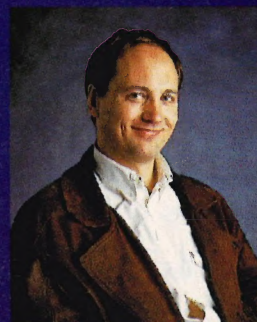
CHRISTINA ERSKINE

PC Review's editor has been out to improve herself this month, researching the best of the CD encyclopaedias on the market, and then relaxing to the strains of Digital Love (not quite as exciting as it sounds — see page 37).



GORDON HOUGHTON

As a long-standing fan of Infocom and Zork, Gordon Houghton was curious to see how Activision's 1990s treatment of the venerable series would turn out. Find out how he got on on page 82.



SIMON SHAW

Our strategy expert has been in the wars this month with Patriot, Kingmaker, The Blue and the Gray and V for Victory 4. Showing no signs of combat fatigue, Simon begins the war game reviews on page 98.

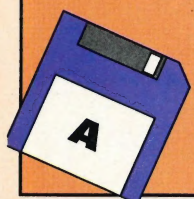
COVER DISKS

With TWO high density disks this month we've really packed them in. First up is SnapGrafx, a drawing package that enables anyone to create brilliant graphics. Global Domination is a world conquest sim, and there's platform antics with Magic Boy. Add to that a pair of Windows utilities designed to make your life a lot easier, and then finish off with a rolling demo of the most eagerly anticipated game of the decade, Frontier: Elite II.

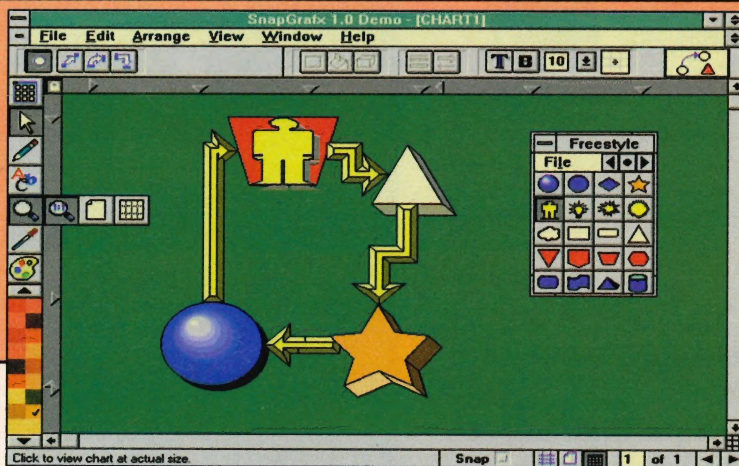


SNAPGRAFX 1.0

3.5" disks
only



On disk A



What is Snapgrafx?

Snapgrafx is a brand new Windows drawing package from Micrografx. It is designed to enable everyone to create eye-catching graphics as easily, quickly and painlessly as possible for a variety of uses. To do this it uses a vast array of ready-made images and clip-art, a set of templates for everything from freehand drawing to Venn Diagrams, and dazzling special effects.

This exclusive demo version has all the features of the full £200 program, bar the ability

to save files or cut and paste to another program, and it will only print the first page of your file.

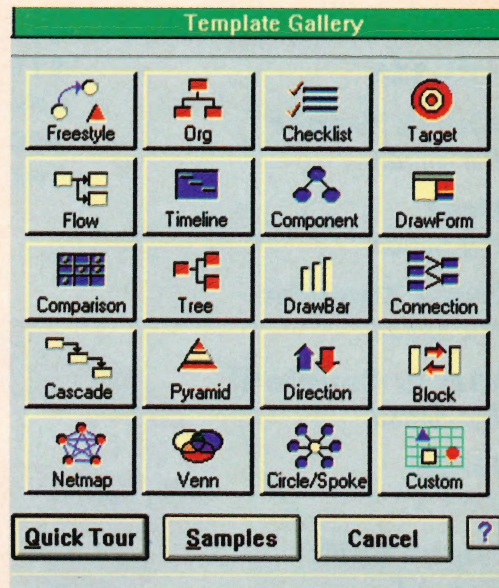
How to install Snapgrafx

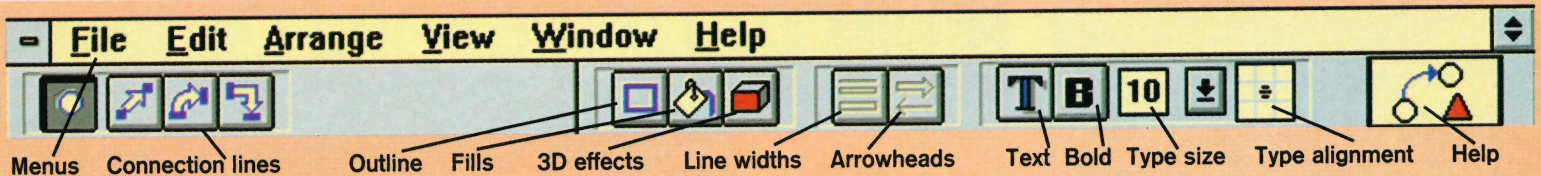
First of all, make sure you've installed Snapgrafx to your hard disk. Then load Windows. Choose **File, Run**

from the Windows Program Manager, and select the file in the Snap directory called Install.exe. Then hit Enter. This will launch the special Micrografx installer, and it will prompt you all the way through the job from there. When

Snapgrafx has been installed, an icon will be added to your Windows Program Manager called Snapdemo. Simply double-click on this to start the program.

The opening screen is where you choose what sort of template you want to work with. These will give you ready-made layouts and special tools for particular jobs – things that would be extremely difficult or time-consuming by to do by hand.





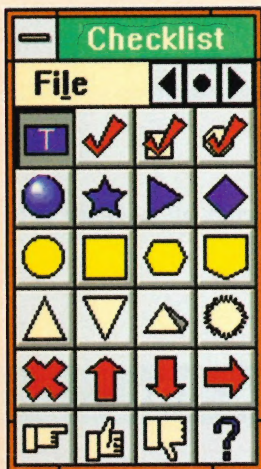
The main menu and ribbon bar will change according to what you're working on. There are loads of special effects and graphic tricks to be found here. Note the help icon on the far right!

How to quit

Either Alt-F4, or File, Quit from the menu will get you out of Snapgrafx. Remember, you can't save the picture which you're working on, so make sure you print it first.

Hardware required

A 386 PC, 2Mb of RAM, DOS 5.0, Windows 3.1 and a mouse.

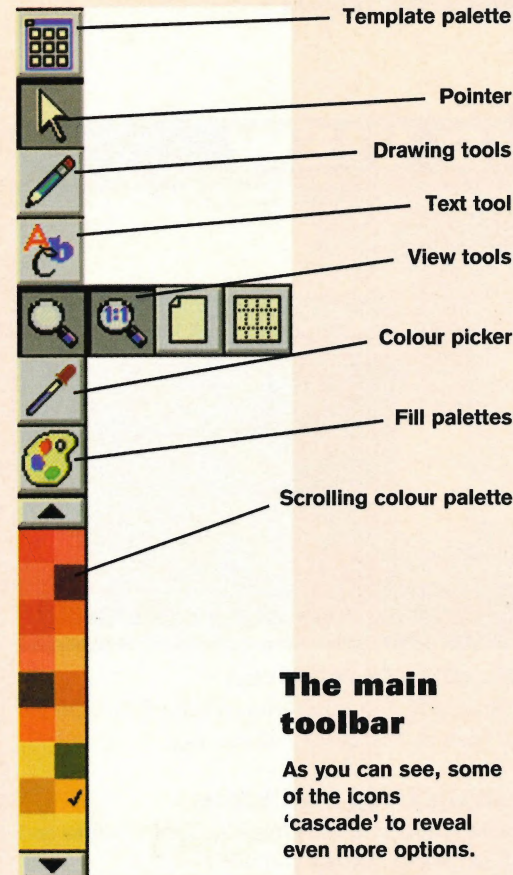


Snapgrafx comes with oodles of clip-art in all sorts of sizes and conveniently placed in on-screen palettes. You can scroll through these by clicking on the direction arrows at the top of the palette. When you've found the symbol you want, simply drag it on to the page with the mouse.



When you start a new picture (File, New) you'll be presented with a screen showing a variety of templates. You can choose one of these to suit the job you're doing, or choose the freestyle template if you want to start from scratch. After that it's up to you. Snapgrafx makes good use of the pictorial, icon-based approach so it really should be very easy to get to grips with it and start experimenting.

To make things even easier, there is a quick tour feature which will take you through all the major features, and the program also comes with standard Windows help on the menu bar, so you can get info on what all the tools, menus and options are for at the click of a mouse. You can always view this or print it out from pretty much any standard word processor if you want.



The main toolbar

As you can see, some of the icons 'cascade' to reveal even more options.

GLOBAL DOMINATION

3.5" disks only



On disk B

You've read the review on page 107, now try the game. Global Domination is a world conquest simulation in which you pit your wits against history's most famous leaders. The object is to expand your empire by conquering territories across the globe.

How to start

Log on to the directory in which you installed Global Domination and type **GLOBAL [Enter]**

How to quit

From the game screen, click on the "i" icon, then select Exit.

Hardware required

386 minimum, VGA, mouse and 600K base memory.

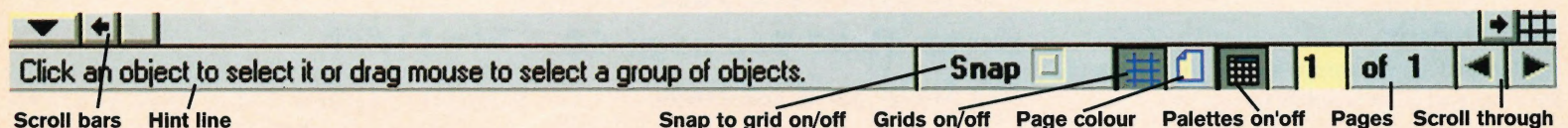
How to play

This demo places you in the thick of the action with most of the territories already under the control of you and your famous enemies. Your territories are red, territories in which a battle is being fought are orange and territories which are in a state of revolution are shown as purple.

To start, you must build your armies. First go

Installing your cover disk: details on page 14

How to use the Snapgrafx demo

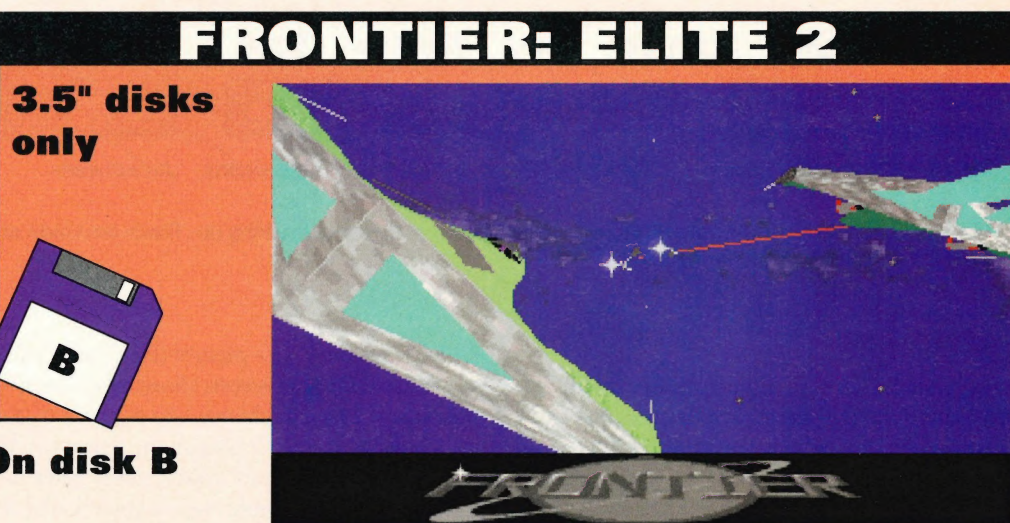




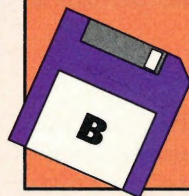
to the logistics screen by clicking on the scales icon with your mouse. Six different sizes of armies are shown by the icons at the bottom of the screen. Click on the number beneath the icon to select the size of the army you wish to build and on the right to return to the main screen. Click on the world map to zoom in. Then click on the bullet icon to build an army, then place it on one of your own territories.

Armies can then be moved into neutral or enemy territories by clicking on the open hand icon, placing it over an army and then dragging into the territory you aim to conquer.

Territories which aren't occupied by an enemy army will fall to you straightaway, but if an army is already present, the territory will turn orange to show that a battle is going on. In this demo, conflicts are resolved by computer and the satellite option to control each battle is not available.



3.5" disks only



On disk B

If you've been holding your breath in anticipation of David Braben's five-years-in-the-making Frontier: Elite 2, then take a look at the review on page 64, load up our exclusive demo and see what all the fuss is about. This is a non-interactive demo, so just put your feet up and enjoy.

How to start

Log on to the directory in which you have installed Frontier and type **FRONTIER [Enter]**

How to quit

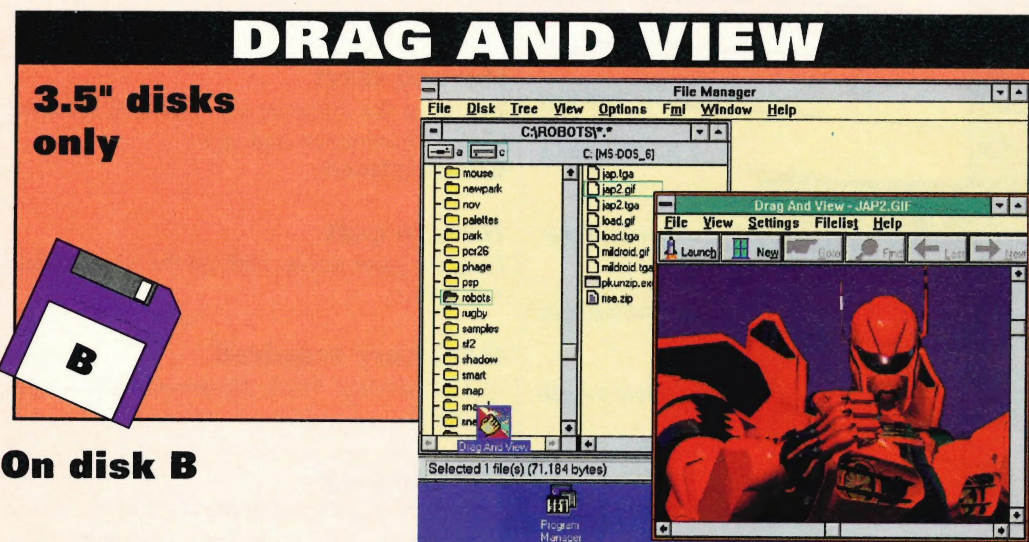
The only way to quit this demo is to reboot your PC. Sorry, folks.

Hardware required

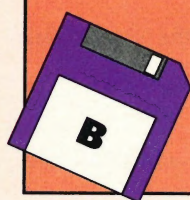
You'll need a 386 processor or better with VGA graphics.

Controls

Since this is a rolling demo, all you have to do is run it and watch.



3.5" disks only



On disk B

This Windows utility enables you to view image files with the minimum of fuss and bother.

How to start

Once you've installed Drag and View on to your hard drive, go into the Windows File Manager and select File, then Run Dvsetup. This will create an icon. Click on the icon to enable Drag and View.

How to quit

Double click on the minus icon in the top left of the Drag and View window to close it.

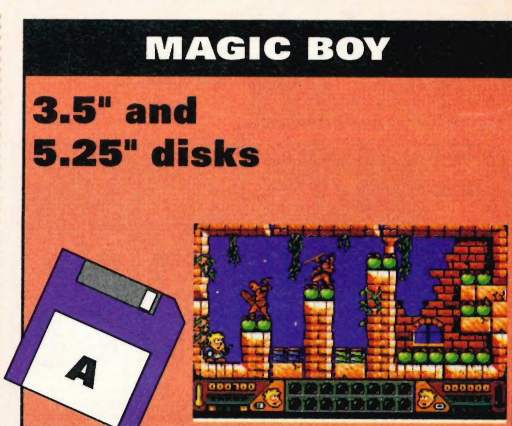
Hardware required

You need a 386 minimum running MS-DOS 5.0 or higher, Windows, and mouse.

Using Drag and View

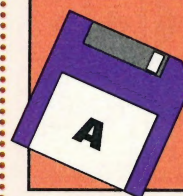
Select Launch in the Drag and View window and then choose the file you wish to view.

Problems with your cover disk? See page 14 for help and advice.



MAGIC BOY

3.5" and 5.25" disks



If you want some arcade action, this demo of Empire's cute platform game offers a taste.

How to start

Log on to the directory in which you've installed Magic Boy and type

MAGICBOY [Enter]

How to quit

Press F10 during the demo to return to DOS.

Hardware required

You'll need a 386 or better, plus VGA.

How to play

Use the cursor keys to move and Space to fire. Shoot the monsters to stun them, then move over them to trap them in your sack.

AMERICA! YOU'RE NEXT.



"Syndicate™ ...Incredibly violent, completely amoral and brilliant fun" PC Zone – 90%
"...Action, strategy, atmosphere: Syndicate has something to please everyone..." PC Review – 9/10



Now, from Alaska to Argentina the cities of the Americas' are out of control. As the leader of a controlling Syndicate you must do whatever is required to bring the troublesome populace back in line before your enemies and business rivals can gain a foothold in the sick and corrupted streets of an America gone wrong.

To assist you in the 21 all new missions the research and development boys have come up with a whole host of deliciously callous weapons and gadgets, all quite capable of aiding your agents in a touch of inner city depravation.

A cunning new clone shield lets

you holographically disguise your agents as ordinary innocent civilians, allowing them to mingle among the nobodies before whipping out their Uzis and mowing down everyone in sight.

Or by merely activating a homing beacon you can call up air strikes that vaporize entire trouble zones of enemies you really can't be bothered to tackle face to face, after all this is America.

And there's network support for up to 8 players, with specially designed multi-player missions, so you and your friends/enemies can all try to out do each other in the nicest possible way.

Syndicate...American Revolt™

The future just got darker.



©1993 Bullfrog Productions Ltd.
 Syndicate and Electronic Arts are trademarks of Electronic Arts.

AMERICAN REVOLT™

SYNDICATE™ DATA DISK



To buy your copy of this game, visit your local retailer. In case of any difficulty, contact EA Direct on: 0753 549442.



BULLFROG
 PRODUCTIONS LTD

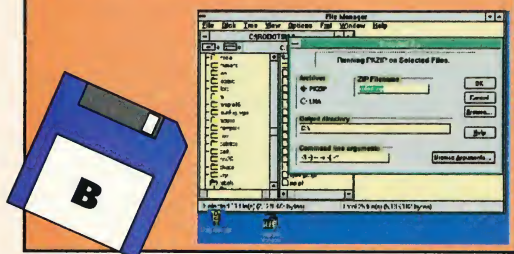


ELECTRONIC ARTS

Distributed in Europe by
 Electronic Arts, 90 Heron Drive,
 Langley, Berks SL3 8XP.

DRAG AND ZIP

**3.5" and
5.25" disks**



This is a Windows utility which compresses one or more files easily using Pkzip or LHA.

How to start

Once you've installed Drag and Zip onto your hard drive, go into the Windows File Manager and select File, then Run Dsetup. This will create an icon. Click on the icon to enable Drag and Zip.

How to quit

Click on the Drag and Zip icon and then select

the option required to close.

Hardware required

A 386 minimum running MS-DOS 5.0 or higher, Windows, and mouse, Pkzip or LHA compression utilities.

Using Drag and Zip

Once the Drag and Zip icon appears in File Manager, drag the files on to the icon and they will automatically be compressed. You can drag a single file, groups of files or a whole directory and they will all be compressed into an archive file.

DOUBLE FIX

Anyone who has used the DoubleSpace disk compression utility that comes with MS-DOS 6.0 will know it's very useful for making the most of your hard disk. However, many games won't run with it and have to be installed on the uncompressed part of the hard drive instead. Even if you're running games or applications from your uncompressed drive, DoubleSpace

still eats into your base memory. Double Fix disables DoubleSpace and frees up extra RAM.

WARNING: DO NOT USE DOUBLEFIX IF YOU ARE IN ANY DOUBT ABOUT HOW TO USE IT CORRECTLY. PC REVIEW AND ROD HYDE WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED BY MISUSE OF THIS UTILITY.

How to use DoubleFix

Install Dbl.bat in the root directory of your host drive (usually H:\). Then read the instructions thoroughly by typing

Type READ.ME

To boot without DoubleSpace type
DBL OFF [Enter]

and then reboot.

To re-enable DoubleSpace type
DBL ON

and then reboot.

Hardware required

Any PC running MS-DOS 6.0

Exclusive free demo offer

With games getting bigger and more impressive all the time, it's not always possible to fit them on to our cover disks. This month we have no less than four demos to give away, so send off the coupon along with a suitable SAE and you could receive the demo of your choice.

Inca II (Coktel Vision)



For the very first time we're offering you the chance to try out an exclusive demo on CD-ROM. Inca II is the sequel to Coktel Vision's Inca, a game which combined the traditions and mythology of the extinct

Inca culture with futuristic space flight and exhilarating combat. One of the most original and interesting games to hit the PC in 1992, Inca had a lot of points in its favour. Inca II looks even better, with all the best elements of the original and several improvements as well.

If you've been intrigued by the preview on page 32, this demo gives you the chance to see this marvellous game in action. The state of the art graphics and cinematic sound just have to be experienced first-hand to be properly appreciated. Believe us, this game is going to blow your mind.

Coktel Vision has 200 CD-ROM demos to give away, so send off the coupon along with a stamped addressed envelope and you're in with a chance.

Send this coupon and an SAE to: Inca II demo Offer, Sierra On-Line, Unit 2, Technology Centre, Station Road, Theale, Reading, Berkshire RG7 4AA. Minimum requirements are a 386, CD-ROM drive and VGA

Name:.....
Address:
.....
☐ Tick this box if you don't wish to receive additional mail-outs

A STATE OF EMPLOY TO DESTROY

They're the meanest mercenaries in the Luyten star system, and they're on a life or death mission.

Join these ruthless soldiers of fortune as they enter a

weird world of mutant killer creatures and hi-tech weaponry.

With sensational graphics, outstanding playability and a unique multi-player mode

allowing up to four players on screen at any time.

Hired Guns is the ultimate multi-player RPG/3D arcade adventure.

Join up now. If you dare.

97% Amiga Force –
"the best Amiga game ever..."

91% Amiga Computer

91% The One 90% Amiga Action

WIN one of 20 advanced Gravis 2-way Amiga adapters. Just answer this question: How many players can play Hired Guns at once? a)20 b)4 c)2 Send your answer on a postcard, stating your name, address, age, type of computer and the name of this magazine. To: Hired Guns take no prisoners, Psygnosis Competitions, Dept. I770, Winterhill, Milton Keynes MK6 1HQ, UK.



HAVE YOU GOT THE GUTS?



AVAILABLE ON AMIGA.



HELPLINE 0891 101 269

All calls cost 36p per min. cheap rate, 48p at all other times. Please ask the bill payers permission before using the phone. For a full set of rules send SAE to Psygnosis, South Harrington Building, Sefton Street, Liverpool L3 4BQ. Entries must be received before 31st December 1993.

FROM THE UNITED STATES OF PSYGNOSIS

How to use the cover disks

1. Put the cover disk in any disk drive and log on to that drive. For instance, if you have put it into drive A: type:

A: [Enter]

2. Now type
PCR [Enter]

to load the installation program.

3. There may be a menu asking you to select which language you wish to have the installation messages displayed in. To make your selection use the mouse or cursor keys to move the highlight bar and then click the left mouse button or press the Enter key.

4. A list of programs on the disk will now be displayed. To select the program you wish to install or run, use the mouse or cursor keys to move the highlight bar and then press and release the left mouse button or the Enter key.

5. If the program is of a type that runs directly it will do so now before returning you to the menu and step 4.

6. If the program has to be installed to another disk you will now have to tell the program where you want it to be installed.

7. The program will suggest a drive and directory to install the program to. If you are happy with the suggested location, press the enter key and installation will begin.

8. If you would like the program to be installed to a different drive and/or directory, backspace over the suggested pathname and enter another one. You cannot install the program on the cover disk itself.

9. If there is insufficient space on the disk you have specified, or if the directory you have specified cannot be created, the program will inform you of this and give you the opportunity to enter an alternative location.

10. All being well, the program should now be decompressed and installed at the specified location. You will see a series of messages on the screen while this is in the process of happening.

11. Once the program has been successfully installed you will see a message reminding you of where it was installed to and telling you which command starts the program. Press a key to return to step 4.

12. When you have installed or played all the programs that you wish to, press Esc to exit to DOS.

Important note for users without a hard disk.

1. Providing that the programs will fit, you can install them on to another floppy disk.

2. If you have a twin drive system you should leave the cover disk in one drive and install each program to a blank formatted disk in the second drive.

3. If you only have a single disk drive, you can install the programs to a blank, formatted disk using the same drive. You should specify drive B: when asked for an install path. DOS will now prompt you when you need to swap the disks.

When it asks you to insert the disk for drive B: you should insert the blank disk. When it asks you to insert the disk for drive A: you should put the cover disk back in. You will have to swap disks several times during the installation process.

4. On some occasions you may be asked to insert a system disk. In this case you should insert a system disk instead of the cover disk, and then swap them again when prompted to do so.

Important note for users with mono, LCD or plasma displays

1. The installation program should automatically detect whether you have a mono or colour display and run in the appropriate mode.

2. If you have a grey scale LCD or plasma display you may prefer to run the program in mono rather than colour. You can do this by starting the program with the command:

PCR M [Enter]

3. If you have a non-standard colour display which the program fails to detect you can force it to run in colour mode by starting it with the command:

PCR C [Enter]

Helpline

If you have difficulty in getting your disk to operate, please telephone our helpline number below before returning the disk.

Disk Helpline: (0685) 350505

The helpline operates between 10.30 am and 12.30 pm weekdays.

Please note

PC Review's cover disks are rigorously checked at each stage of production for all known viruses and duplicated under strict quality control.

However, cover disks are used at the reader's own risk. PC Review can accept no responsibility for damage to either data or hardware caused by use of our cover disks.

We also make every effort to ensure that the contents of our cover disks are exactly as advertised. If, however, circumstances should dictate that we are unable to supply the stated programs we will endeavour to provide alternative software.

PC Review, its distributors and retailers will not be held responsible for any unnotified change to the contents of the disks.

Faulty disk?

PC Review's cover disks are checked and validated, but if you have reason to believe yours is faulty, pop the disk(s) in a jiffy bag with a self-addressed envelope and postage to the value of 28p (55p from overseas) for return of the new disk and the form below (filled in), and send the package to the following address:

PC Wise

**Dowlais Top Business Park, Dowlais
Merthyr Tydfil, Mid-Glamorgan
Cymru, CF48 2YY**

Please DO NOT send the disk back to PC Review — we don't hold stocks of spare disks.

Name:.....

Address:.....

.....

.....

The disk on my copy of PC Review was damaged. Please send me a replacement — I enclose return postage to the value of 28p (55p if overseas) and the original disk

THIS MAN IS WANTED THROUGHOUT THE GALAXY.



In an unprecedented move the Interstellar Revenue Decimation Service have appealed for public help in tracking one of the greatest debtors in history.

Known as Jack T. Ladd, he was presented yesterday with a tax bill reputedly totalling at least twice the gross national income of several major star systems, and given 28 days to pay. This was the last that the IRDS saw of him.

The photo-fit recreated here has been put together from descriptions supplied by various members of the IRDS, several bartenders, his landlord and fourteen women with intimate knowledge of him.

Known throughout the underworld as a professional thief, Jack T. Ladd has already been sighted on three planets, one Cloud City and at least four bars. It is believed that he is involved in various nefarious deals in a vain attempt to raise the money he owes. However a spokesman for the IRDS told us "He doesn't have a chance, he's only got four weeks and our patience is already running thin. We've got him by the XXXX's."

If you see this man do not approach him, he may be armed. We know he carries a fully loaded credit card wallet, and women especially are advised to avoid him at all costs. His charm is lethal.

WIN a fabulous Innocent Until Caught baseball jacket. Just answer this simple question: Who is Chasing Jack T. Ladd?
a) MIS b) the IRDS c) the FBI
Send your answer on a postcard, stating your name, address, age, type of computer and the name of this magazine. To: Who is Jack T. Ladd? Psygnosis Competitions, Dept. 1770, Winterhill, Milton Keynes MK6 1HQ, UK.

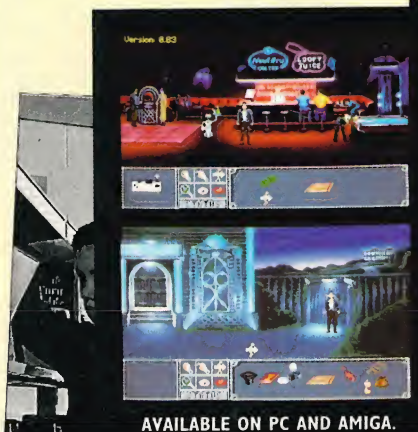


UNITED STATES OF PSYGNOSIS ANNOUNCEMENT.

Playing Innocent Until Caught is thought to be addictive. 10Mb of data, superb gameplay, realistic 8-way movement and features including SmuttiText™, Censo-Round™ and CyniPlay™, are but a few of the ingredients thought to be included in an insidious attempt

to lead the fine young people of our Galaxy off the straight and narrow, down the rocky road of debauchery.

We also warn that playing this game constitutes an attempt to assist one of the greatest villains of our time in avoiding lawful repayments of taxes. Anyone found abetting this criminal will be dealt with severely. If you have already encountered this man and are facing a dilemma call the Innocent Helpline.



AVAILABLE ON PC AND AMIGA.



HELPLINE 0891 101 276

All calls cost 36p per min. cheap rate, 48p at all other times. Please ask the bill payers permission before using the phone. For a full set of rules send SAE to Psygnosis, South Harrington Building, Sefton Street, Liverpool L3 4BQ. Entries must be received before 31st December 1993.

Interplay™

BATTLE CHESS®

CHOOSE YOUR

**YOU'RE ABOUT TO ENTER A MEDIEVAL
WAR THAT TAKES NO PRISONERS!**

You'll watch chess pieces saunter across the chequered
battlefield to slay their opponents.

- Play against the computer or a friend.
- An opening library of 30,000 strategic moves.
- 10 levels of play - suitable for 12 year olds and upwards.
- Spoken 30 minute tutorial - given by each chess piece.
- Witness brutal executions in breathtaking animation.



The Lord of the Rings™

J.R.R. Tolkien's

Welcome to the enchanted but dangerous land of J.R.R. Tolkien's Middle Earth.

You are Frodo Baggins, leader of a benevolent band of hobbits, dwarves, elves and a wizard, on a mission to destroy the One Ring that has the power to end your world.

- ♦ The largest full motion window ever in a PC game allows you to experience epic scenes from Ralph Bakshi's animated adventure movie.
- ♦ The voice-over tutorial makes getting started easy and fun.
- ♦ Full stereo CD soundtrack.
- ♦ Enhanced user interface.
- ♦ Automap feature to plot your progress.

WEAPONS WISELY

STAR TREK

25TH ANNIVERSARY

Strap yourself securely into your seat, because you're about to navigate through the ultimate space adventure at warp speed! You'll scan and survey bizarre new worlds. Then lead your landing party on a heart-pounding mission where you'll discover alien races and artefacts... all faithfully authentic to the Star Trek TV series.

- Hear Captain Kirk, Mr Spock, Bones and many other members of the original crew speak directly to you.
- Authentic musical score and sound effects from the TV series.
- All new exciting ending.
- 256 colour VGA graphics.

ENHANCED

C I N E M A T I C M U L T I M E D I A



ROM

TM & © 1991 Paramount Pictures. STAR TREK and U.S.S. Enterprise are trademarks of Paramount Pictures. © 1993 Interplay Productions Ltd. Cinematic Multimedia is a trademark of Interplay Productions Ltd. All Rights Reserved. This program is published with the cooperation of the Tolkien Estate and under license from George Allen & Unwin Publishers Limited. The plot, as well as the names of the characters and other characters from The Lord of the Rings, are the property of George Allen & Unwin Publishers Ltd. 1996, 1973, 1979, 1981. Cinematic Multimedia is a trademark of Interplay Productions Ltd. © 1993 Interplay Productions Ltd. All Rights Reserved.

NEWS

New Psion sounds off

As an extension of its popular Series 3 range of hand-held computers, Psion has launched the Series 3A. Combining a screen four times as large with three times the software in the same pocket-sized case, the Psion Series 3A personal information manager also introduces voice and sound capabilities.

The 3A incorporates a microphone, a loudspeaker and features a built-in application that provides a record and playback facility for making 'voice jottings' and recording sounds to be used as alarms.

"The Series 3A heralds the beginning of real voice interface development," says David Potter, the chairman of Psion, "the applications for sound and voice are innumerable." Psion has long been interested in the potential of voice recognition on hand-held computers.

The Psion Series 3A is priced at £269.95 for the 256K model and £329.95 for the 512K model. Contact Psion on (071) 262 5580 for further details.



Take the graphics tablets

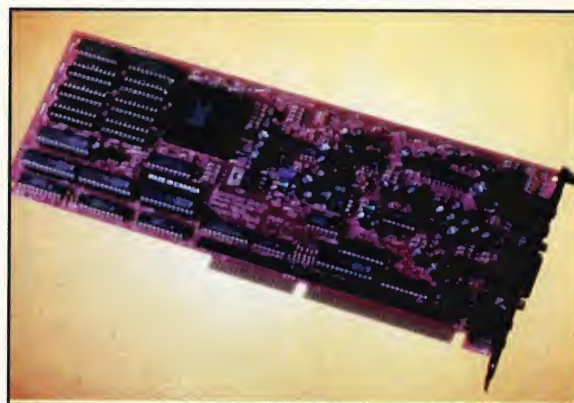
CalComp, one of the computer world's leading graphics specialists has launched DrawingSlate, a thin, low-cost graphics tablet for DOS and Windows. The DrawingSlate is aimed at users who require a more accurate pointing and tracing device, and is suitable for design, DTP, and drawing applications.

Less than 3mm thick, the DrawingSlate only weighs in at under 400g and is supplied with a cordless pressure sensitive pen as standard. The tablet supports resolutions up to 1,270 lines per inch and claims an accuracy of 0.01 inch (0.25mm).

DrawingSlate connects to all IBM compatible PCs and is priced at £275 for the A5 size. Other sizes are available, and all inquiries should be directed to CalComp on (0734) 344012.

Sound Blaster gets more creative

Creative Technology recently announced two new versions of its Sound Blaster 16 audio card series. The Sound Blaster MultiCD has all the features of the standard SB16, but includes three built-in CD-ROM interfaces, while the Sound Blaster SCSI-2 has an interface that allows multiple SCSI devices to be accessed via the one controller. Both packages are also bundled with Creative's Windows speech recognition software, VoiceAssist, and WaveBlaster, the general MIDI compatible sampled wave synthesis daughter board. Both the cards are also available with Advanced Signal Processing for an extra £40, or the standard card can be upgraded to include this facility.



In addition, Creative Technology has also launched QSound Virtual Audio into its 16-bit sound card range. QSound simulates a 'surround sound' experience using only two speakers and will be packaged with the Advanced Signal Processing versions of the MultiCD and SCSI-2 sound cards. QSound has been developed by a Canadian company, Archer Communications, and has been used by recording artists such as Madonna, Sting and Paula Abdul.

The MultiCD Sound Blaster retails at £189 and the SCSI-2 at £219. For the ASP versions, the MultiCD and SCSI-2 sell at £229 and £259 respectively.

For more information, contact Creative Technology on (0743) 248590.

US Gold goes public

US Gold became the first computer games publisher to launch on to the Stock Exchange last month when shares in the holding company Centregold began trading at 167p on October 28. The Centregold group of companies, capitalised at £50.3 million, comprises US Gold, distributors Centresoft, IBD and PDQ, merchandising operation ISM and Electric Dreams, the store within Harrods.

The group plans to use the money raised to strengthen and expand its activities in interactive entertainment, particularly in the console market, since US Gold is to start purchasing its own cartridges rather than ordering them through Sega Europe. This will require a hefty outlay, especially for carts such as the forthcoming Winter Olympics game. The extra income will also fund development in CD-ROM titles and products for the forthcoming 3DO format.

US Gold was founded by Geoff and Anne Brown in 1984. After Geoff had found it difficult to buy games

for his Atari 800 he began importing them from the US himself, and US Gold was born. It signed up a number of prestigious US publishers (such as Access, MicroProse, SSI, Epyx, and Lucasfilm), and more recently some in Europe as licensors and while some, such as MicroProse, have since opened their own European offices, many have stayed with USG.



IN BRIEF...

- The leading route planner program, AutoRoute, has just been upgraded again. The latest release, AutoRoute Express v3.0, includes new map information, such as details of the whereabouts of London police cameras! The upgrade also calculates fuel consumption for each journey and enables you to program trips to start specifically from your house or office. Call NextBase on (0344) 873445 for more details.

- A £179 Mitsumi CD-ROM drive with a 350ms access time is among many new products in the new Misco Computer Supplies catalogue. Misco can be contacted directly on (0933) 400000 for more information.

- Logic 3 has announce the arrival of the Quatro and the smaller Pinto arcade style joysticks retailing at £12.99. But that's not all, because Logic 3 have also release the Delta Ray Joystick featuring a 'comfort grip' handle, five fire buttons and an extra long connector cable. For more information, contact Spectravideo on (081) 902 2211.

HMV opens Level One



The largest computer games store in the world opened last month at HMV in Oxford Street, London. Level One covers 6,000 square feet

and has space to stock 5,000 games, covering all computer and console formats, with a comprehensive range of PC titles. By the

end of the year, HMV plans to have games departments in 40 of its UK stores — nearly half the HMV chain.

Turn your 386SX into a 486

Upgrade Solutions has announced an upgrade for 386SX machines that effectively doubles processor performance.

Based on the Texas Instruments 486SLC CPU, the Rev To 486 is compatible with most 386SX based computers and can be easi-

ly installed in a few minutes by simply snapping the 3cm square module over the top of the existing 386SX processor chip.

The Rev To 486 is available from Upgrade Solutions at a cost of £199 and for more information call them on (0734) 810020.

Key guides from Computerware

Computerware is producing a set of keyboard templates for popular applications. Twenty different guides can be mounted on the keyboard at once which flip over, Rolodex-style. Guides have already been produced for WordPerfect, Lotus 1-2-3 and Supercalc, but of course, you could always create your own. For more details, contact Computerware on (0734) 892777.

UFO lands on PCs

Guildsoft has released UFO, a Windows-based package which explores the phenomenon of unidentified flying objects. It contains an extensive database of over 500 documented sightings, including photographic evidence. Specific information can be found by event, date or map location. A CD-ROM version is also available, and includes data on 1,200 sightings plus photographs, full-motion video and audio.

UFO requires a PC with 2Mb RAM, Windows 3.1 or higher, Hard Disk and a Microsoft compatible mouse. The floppy version retails at £41.07 and the CD-ROM will be priced at £52.82. For additional information call Guildsoft on (0752) 606200.

YOU ASKED FOR IT!

PREMIER MANAGER transformed the face of **STRATEGY** football management games with its accessible and enjoyable game style. It has remained in the charts since its release late in 1992. And now, **PREMIER MANAGER 2** is ready with a whole host of added features.

Have you the management skills to turn around and improve your teams performance?

Get ready to blow the whistle on **THE** football game for 1993.

FEATURES INCLUDE:

- 16 playing formations with 8 playing styles and 12 match tactics.
- Negotiate wages, bonuses and contracts.
- Comprehensive banking system with changeable interest rates.
- Up to 26 players per team with limit of 4 foreign.
- Set ticket prices and crowd control.
- **IMMEDIATE** sacking possible if you're not up to the job.

"This really is the best bits of all the footy games, bundled together and laid out on a golden plate for you."

The One 90%.



YOU GOT IT.



AVAILABLE ON: AMIGA/A1200 and PC 3.5"

SPECIAL OFFER

Compton's Interactive Encyclopaedia

Active Distribution is offering PC Review readers an exclusive competitive upgrade offer to Compton's Interactive Encyclopaedia. the CD-ROM based multimedia reference guide.

The RRP for Compton's is £352.49, inclusive of Vat, but using the form below, you can obtain the encyclopaedia for just £140.86 (if this seems like an odd amount, it's because it's £119.99 plus Vat). As this is a competitive upgrade offer, in order to participate, you need to include with your form and cheque the cover from the manual (ie, a proof of purchase) from any other CD-based encyclopaedia, such as Grolier's, Encarta, Mammals Multimedia Encyclopaedia, etc — Active says it

Special upgrade offer

will be fairly flexible about the definition of 'encyclopaedia'.

Compton's Interactive Encyclopaedia is a whole set of reference books on CD-ROM. As well as over 33,500 articles, the program also contains 10,000 images, 162 videos and animations, 800 maps and audio clips, ranging from speech to musical extracts.

To take advantage of this exclusive offer, all you need to do is to fill in the form below, and sent it, together with a cheque made payable to Active Distribution, and the cover from the manual from a CD encyclopaedia, to Encyclopaedia offer, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Please make sure it reaches us by December 15, 1993 and allow 28 days for delivery.

If you would like to find out more about Compton's Interactive Encyclopaedia, turn to our feature this month on CD-ROM reference programs, which begins on page 51.



Compton's Interactive Encyclopaedia

Yes, I would like to take advantage of Active Distribution's competitive upgrade offer at the special price of £140.86. I enclose with this form a cheque made payable to Active Distribution, and a cover from the manual of the CD-ROM encyclopaedia I own.

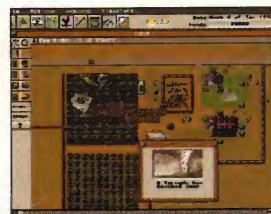
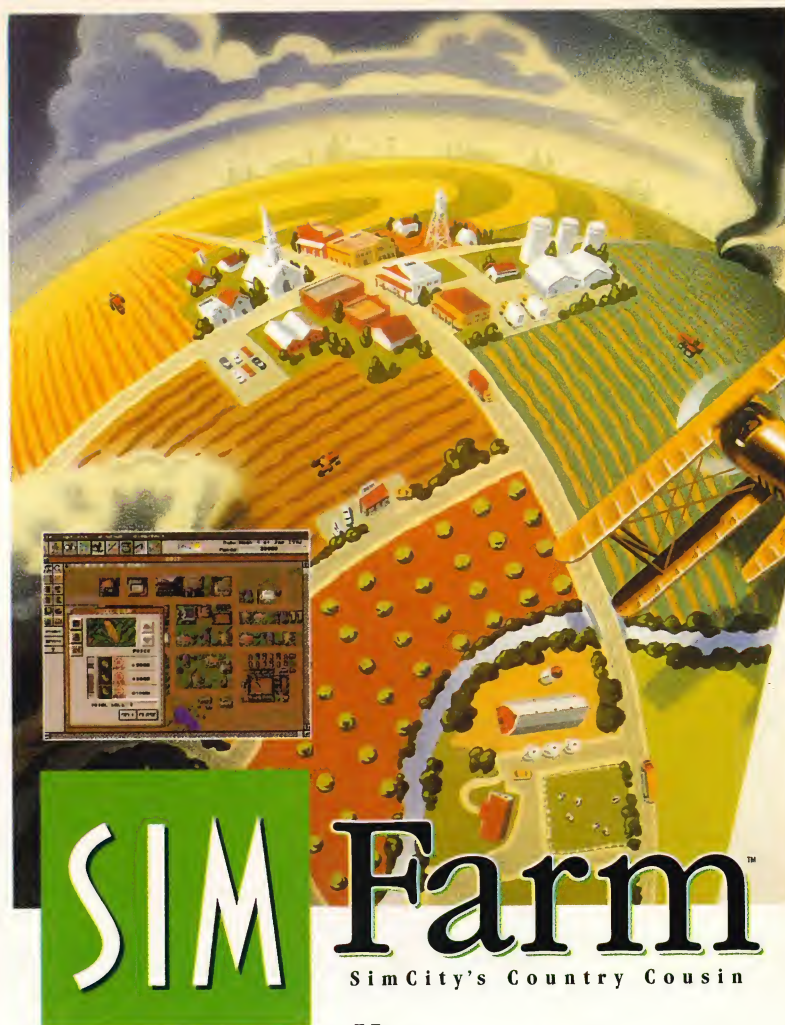
Name _____

Address _____

Telephone (daytime) _____

Send this form with payment, and cover as stipulated above, to Compton's Encyclopaedia offer, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

Offer closes December 31st, 1993



AVAILABLE FOR:

IBM PC & 100%

COMPATIBLES

RRP £34.99

Published By



Mindscape International Ltd
Freepost Product Information
Priority House, Charles Avenue
Maltings Park, Burgess Hill
West Sussex RH15 9PQ
Tel: 0444 246333
Fax: 0444 248996

Distributed By



For further information cut out this coupon and send it to the FREEPOST address above.

YES. PLEASE TELL ME MORE ABOUT SIMFARM

PCR11

NAME _____

ADDRESS _____

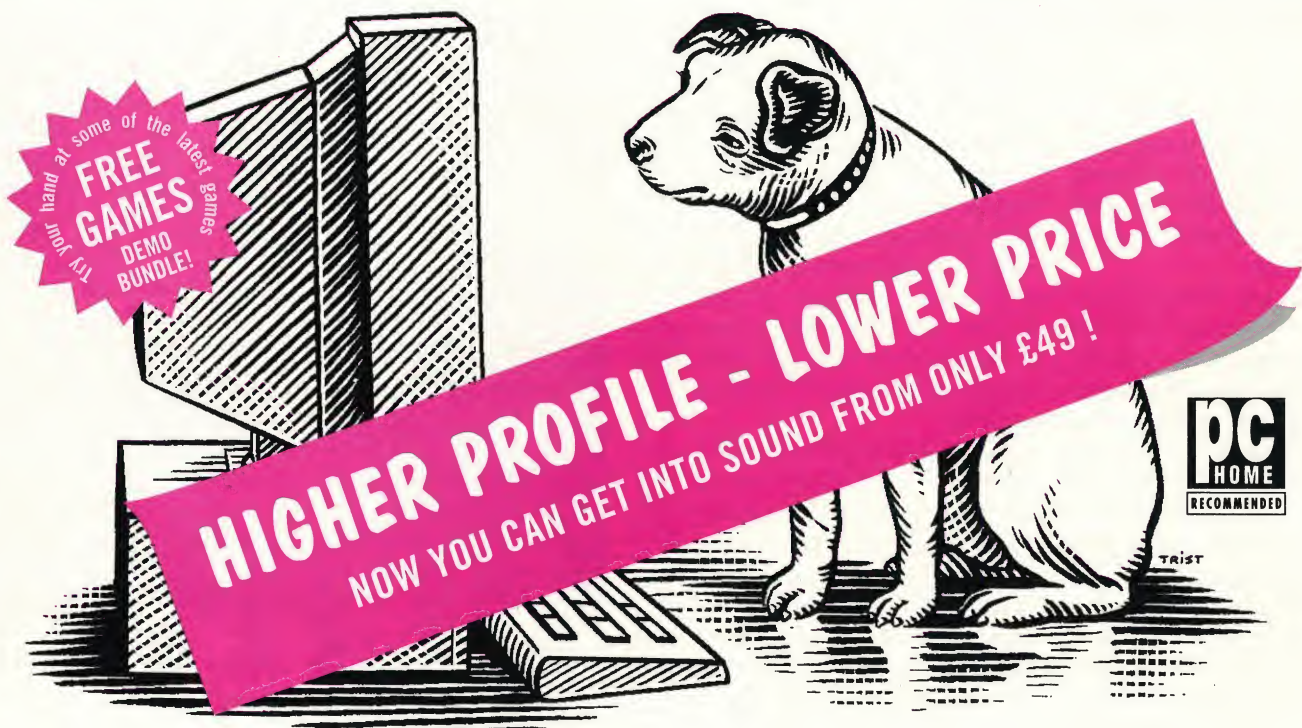
POSTCODE _____

TELEPHONE _____

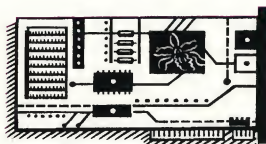
MACHINE OWNED _____

From time to time your name and address may be provided to carefully screened companies who may wish to send you literature. If you would prefer not to participate please tick this box. ☐

HIS MASTER'S CHOICE

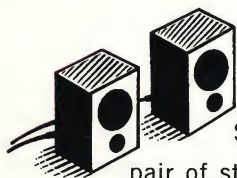


Orchid Sound Producer



become the popular choice!

For Multimedia to games, fully compatible with SoundBlaster and AdLib, it's been so well received that *PC Home* made no bones about recommending it!



Which could be because the Sound Producer system includes a pair of stereo speakers, a built-in 4 watt amplifier and its MIDI interface affords access to the world of professional music production.



Or because Sound Producer/Pro - with

Since his master introduced Sound Producer, a year ago, to bring quality sound to his PC, astoundingly it's

20-voice stereo FM synthesizer, CD ROM interface, software-controlled studio standard stereo mixer/ volume, microphone and Voice Notes software - sounds even better!

What *is* clear is that its successful pedigree has enabled his master to take a bite out of its bark and cut its price to only £49 for Sound Producer and to £89 for Sound Producer/Pro!

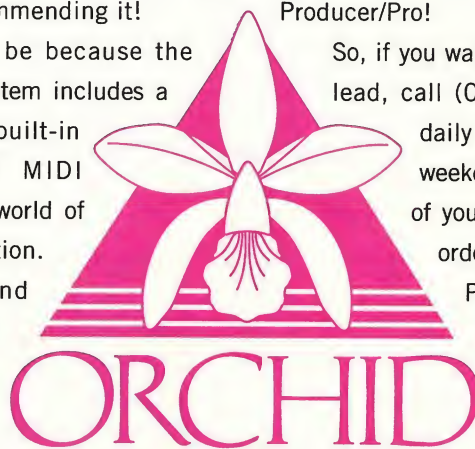


So, if you want to run with the pack, take their lead, call (0256) 817722 - lines are open

daily 8 'til 8 including weekends - for details of your nearest dealer,



order the higher profile Orchid Sound Producer at a lower price... and make his master's choice!



ORCHID (EUROPE) LTD., BASINGSTOKE, UK. TELEPHONE (0256) 817722 FAX (0256) 64222

Copyright Orchid (Europe) Ltd. 1993. All trademarks recognised. Prices exclude VAT. E&OE.

Making the right pitch

Accurately explaining that great idea you've had for a new computer game may be more difficult than you thought. Steve Cooke makes the case for better scripts

Ten crisp five pound notes will find their way from my pocket into the hands of whoever comes up with the most impressive answer to the following question: how do you describe a game?

You might think this is easy. PacMan was a single-screen game in which a small animated character moved – under player control – around a maze swallowing dots and (for bonus points) symbols. Also moving round the maze and in pursuit of the player token are four ghosts. Collision with a ghost loses one player life. A limited number of power pills are scattered around the maze and swallowing one of these makes the ghosts vulnerable. The period of vulnerability lasts for a few seconds and during this time if the player token collides with a ghost, the ghost is temporarily banished to a pen at the centre of the maze. Gameplay consists of balancing dot and symbol consumption, avoiding the ghosts and gaining further bonuses when possible by 'penning' the ghosts. Clearing all the dots on a screen leads to the next screen, with the game layout, but where the ghosts move faster.

Phew! That was just PacMan – now try



Eye of the Beholder 1: defying description?

describing Eye of the Beholder. You'd obviously need much more space.

Actually, you'd need a colossal amount of space, because in one important respect even our verbose description of PacMan is completely useless. If the game did not exist, the description above would be quite inadequate to serve as a guide to producing the game. Our description, in other words, is some miles away from being a 'script' in the same sense that a screenplay for a film is a 'script'.

With increased development budgets and ever more complex technologies, being able to describe a game accurately in script form is becoming ever more important. Good scripts save money, save mistakes, and encourage investment in good projects. The games industry needs to begin developing a set of concise conventions for describing games. Of course, just as in film, there will always be

nuances in the final product that go beyond the original blueprint. But we need something a lot better than the so-called game designs we get today.

For example, I have in my hands a game design from a prestigious development company (all names have been withheld to protect the guilty). It consists of seven sections and totals about 30 pages.

This document starts with a scenario – a mind-numbing attempt at a science-fantasy mini-novel which is presumably meant to get us excited but actually has nothing whatsoever to do with games. There are then about five pages describing what is called "game mechanics", which, if a programmer paid any attention to it, would impose absurd restrictions on the gameplay, since it doesn't even mention player interaction – it just tells you what you have to kill. Finally, there are some notes on graphic representation and then, just in case you

weren't already doing business with someone else, a 'conclusion' which is – yes, another mini-novel to wind things up.

The supposed aim of this document is to raise investment for the development of a game. Most software publishers have to deal with designs of this nature and you'd be horrified to hear that hundreds of thousands of pounds of development money change hands on the basis of this sort of thing. No wonder that coming up with a good game, on time, on budget and by design is currently all but impossible.

So what do you think there should be in a game design document? Entries on paper, please, to me at the PC Review office, or by e-mail to electric@cix.com-pulink.co.uk. We'll discuss the results in the January 1994 issue. And by the way, the game design I just mentioned above succeeded in raising oodles of development money and ended up being a major release on the PC. It was crap.



THE COOKE REPORT

USE YOUR HEAD THIS CHRISTMAS!

well...you asked
for it but are you
gonna get it?
just cut out the pic,
make sure your
nearest and dearest
brings it to us. They part
with the money,
you slam it in the
machine - doddle!



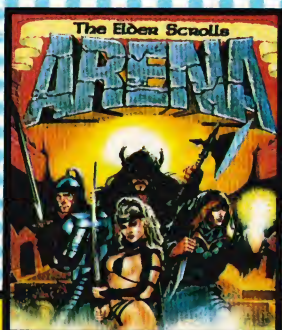
Sam & Max



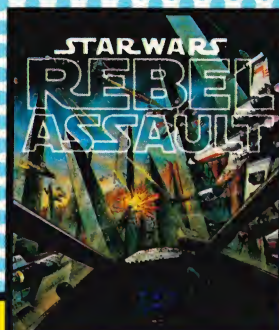
Flight Simulator 5.0
© microsoft



Star Trek 2™
'judgment rites'



The Elder Scrolls



Star Wars
'Rebel Assault'

BE A HOT SHOT...

with
pc games

USE YOUR HEAD
AND SAVE!

SPEND OVER £10
AT VIRGIN THIS
CHRISTMAS AND WE'LL
GIVE YOU A VOUCHER TO
SAVE MONEY ON
MUSIC, VIDEO AND GAMES IN '94



ahead of the game



GAMES CENTRES

Ciarán Brennan

finds that compact disc technology is not all that it was cracked up to be

Stop this CD revolution, I want to get off

In the four years or so that I've been actively involved in PC gaming, I've been privileged enough to see the arrival of the CD-ROM like some sort of great technological train approaching from the distance.

At first, it was just a distant speck on the horizon, vague and mysterious, but chock-full of promise and potential. Whatever this locomotive turned out to be, those of us watching just knew that it was going to change our lives, forever and for better.

Some time later, we remained rooted to the same trackside. Maybe by now we'd noticed that the oncoming monster wasn't quite as shiny and beautiful as we'd first imagined, but the promise of future riches still held us there, captivated by all of the glittering promises and hopes which were coming our way on the CD Express.

Now, however, at the end of 1993, it's beginning to look as though this new arrival isn't a shiny express at all, but a hideous smoke-belching freight train – and worse still, we're not standing on the platform, we're tied to the track.

This, I'm sure you'll agree, is a pretty cynical and tortured metaphor, but it does serve to sum up the feelings of despondency and cynicism which have begun to set in among many spectators on the PC games business, myself included.

The most telling words on the subject published of late came in the October issue of this magazine. In the special report entitled Decline and Fall of the

Floppy Disk, Electronic Arts' European boss, Mark Lewis, revealed that, alongside true 'multimedia' CD-ROM titles, will come another breed of essentially conventional PC games, but delivered on CD rather than floppy disk.

These games will be identical in every way to their disk-based counterparts, but they will still have to be installed to the user's hard drive because not even the quickest CD-ROM drive is capable of delivering code to the PC's processors at an acceptably speedy rate.

The bottom line, therefore, is that instead of being the new technological Messiah we'd all been awaiting, CD-ROM is actually going to be little more than a digital DHL, useless except as a delivery medium.

Most of us worked out quite some time ago that it's not technology which makes good games, it's good ideas. Lemmings, as a perfect example, would not be improved by use of texture mapping or SVGA graphics, while Ultima Underworld would remain a classic role-player even in four-colour CGA.

There are, of course, cases where clever use of technology has been combined with a strong idea to produce a near perfect package: take X-Wing, for example –

“ ... instead of being the new technological Messiah, CD-ROM is going to be little more than a digital DHL ... ”

where would that be without the high speed graphics and wonderfully atmospheric sound effects?

Multi-coloured palettes, stereo sound circuits, monstrous storage capacities and supersonic processors can and do improve some games, but no amount of these essentially cosmetic touches will ever make a poor game acceptable.

The Big Lie which has been sold to us with regard to compact disc technology is that not only is it going to offer all of the above (and it's not), but also that the mere addition of a CD-ROM drive to your PC is going to transform it into a 'multimedia entertainment centre' – or whatever this month's buzzword is.

The truth is that computer games on compact discs will be no better and, despite the fact that CD production is infinitely cheaper than multiple floppy disk duplication, probably no cheaper than your current favourites.

On the other hand, a CD games collection will sit more comfortably in your living room than an untidy bunch of floppy disks, so maybe the great change-over will be worth it after all.

Lord of the Rings has an improved interface, an automapper but not much else. Is this really the future of CD gaming?



**"WAIT 'TILL YOU SEE
THE REDS OF THEIR EYES..."**



VIRGIN INTERACTIVE ENTERTAINMENT PRESENTS A NORLEDGE/HICKMAN PRODUCTION A PROBE GAME "TERMINATOR 2"
MATT LAMPRELL, NIKKI HEMMING, DAVID MILLER WRITTEN BY DICK SHUNNARY EDITED BY MUSTAPHA SCALPEL
WARDROBE MAHATMA COAT ORIGINAL SCORE 205,500 GAGS JO KING HUGH MERR
BASED ON THE FILM "TERMINATOR 2: JUDGMENT DAY" DIRECTOR JONVY WATSON

Acclaim

Acclaim is a registered trademark of Acclaim Entertainment, Inc. © 1993 Acclaim Entertainment, Inc. All rights reserved.
Terminator, T2 Endoskeleton and depiction of Endoskeleton are trademarks of Carolco Pictures International N.V.
© 1992 Carolco Pictures International N.V. All rights reserved.

Virgin

Some days nothing

ALIEN

VIRGIN INTERACTIVE ENTERTAINMENT
PAUL DOWLING SEAN BRENNAN MUSIC BY BEN J. MURRAY
EXECUTIVE PRODUCER HERO DAVISON EDITOR
BASED ON THE FILM "ALIEN"

Acclaim

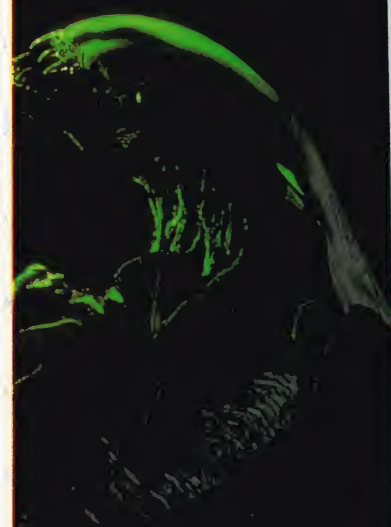
Acclaim is a registered trademark of Acclaim Entertainment, Inc. © 1993 Acclaim Entertainment, Inc. All rights reserved.
Alien is a registered trademark of Twentieth Century Fox Film Corporation. © 1982 Twentieth Century Fox Film Corporation. All rights reserved.

Now showing on PC & Amiga

Now showing

g seems to go right.

N 3



WOLFGANG PETERSEN PRESENTS A PROBE PRODUCTION "ALIEN 3"
RIPLEY SCREENPLAY BY JOY PAD EXECUTIVE PRODUCER JOHN CARVER
DIRECTOR OF PHOTOGRAPHY LEN SCAPP
ALIEN 3 DIRECTED BY D. RECTOR

Acclaim Entertainment, Inc. © 1993 Acclaim Entertainment, Inc.
Twentieth Century Fox Film Corporation. All rights reserved.

Virgin

Lose is a four letter word.



MORTAL KOMBAT

VIRGIN INTERACTIVE ENTERTAINMENT PRESENTS A NORLEDGE/HICKMAN PRODUCTION A PROBE GAME
LEE THAL HUGH JUPPERCUT DANIELLE WOODYATT PETER BALL SCREENPLAY BY ANNE NIHILATE
DIRECTOR OF PHOTOGRAPHY D. CAPITATION EDITOR R. CADE-CONVERSION DIRECTOR PAUL MILES

Acclaim
MIDWAY

Acclaim is a registered trademark of Acclaim Entertainment, Inc. © 1993 Acclaim Entertainment, Inc.
All rights reserved. Mortal Kombat is a trademark of and licensed from Midway Manufacturing Company.
© 1992 All rights reserved. Used by permission.

Virgin

ing on Amiga

Now showing on PC & Amiga

Virgin

WIN

A 486DX PC

We do try to push the boat out when it comes to competition prizes and this month we reckon we've surpassed ourselves. We've put together a set of mouth-watering prizes in this special competition which will take place over two months: this issue and Issue 27, dated January 1994, and in the shops on December 15th.

The prizes

Firstly, we have no less than a 486-based PC, complete with internal, double speed, multi-session CD-ROM drive from Unica. Just check out the specs of this machine in the panel to see what's on offer: 33MHz 486DX processor, 4Mb RAM, 250Mb hard disk, 14" colour monitor and a superb bundle of CD-ROM software, including the stunning Hutchinson Encyclopaedia on CD.

Normally this Unica Media Pro 486-33SX sells for £1,756.63 (including Vat) — the winner of this competition gets the machine for just the price of the stamp on the entry form!

Unica the company specialises in multimedia products — it's not only the UK's largest CD software supplier, but it also produces peripherals, such as CD-ROM drives and upgrade kits, to NEC, Kodak,



Unica Media Pro 486-33

- * 486DX processor running at 33MHz
- * 4Mb RAM
- * 250Mb hard disk
- * Panasonic double speed, multi-session CD-ROM drive
- * Sound Blaster Pro sound card
- * 1.44Mb 3.5" disk drive
- * Microsoft compatible mouse
- * 16 million colour bus VGA card
- * Non-interlaced 14" colour monitor
- * MS-DOS version 6
- * Windows 3.1
- * CD software: Hutchinson Encyclopaedia
- 1993 Guinness Multimedia Disc of Records
- The Animals
- Hot Stuff! (graphics gallery)
- The 7th Guest

Normal RRP: £1,756.63 including Vat

Creative Labs, and Media Vision, among others. The Media Pro range is its own series of highly specified multimedia PCs.

One very lucky winner will receive this Unica Media Pro 486-33 machine, but three more people are also in for a treat, with the three Dracula packages we've also lined up as prizes.

Prizes from the crypt

Each package contains no less than five versions of the classic Transylvanian story, starting with VHS video of Francis Ford Coppola's film, Bram Stoker's Dracula, starring Anthony Hopkins,

Keanu Reeves, Gary Oldman and Wynona Ryder. This video is due to go on sale on December 1st, for £13.99. As a video companion, the pack also includes The Making of Dracula.

Also in the package is Psygnosis's PC version of Dracula, a first person perspective fight and flight game which captures much of the dark atmosphere of the story (reviewed in PC Review, Issue 25).

The box of goodies is completed with the compact disc (audio) of the film's soundtrack and the role-playing board game based on the Dracula legend — £100-worth of a classic horror legend for each winner.

WITH CD-ROM DRIVE

PLUS DRACULA — THE AUDIO, VIDEO AND COMPUTER EXPERIENCE

THREE COMPLETE PACKAGES TO BE WON

How to enter

Step 1 First, you need to answer the questions which appear below.

Step 2 When you've got the answers, note them down somewhere in a safe place.

Step 3 Wait for the next edition of PC Review for further instructions.

Don't send us anything just yet!

Remember, there's no coupon printed this month because you are obviously going to need the answers to next month's questions as well. We'll publish the entry form in next month's edition of PC Review.

The questions

1 Who played Count Dracula in the Francis Ford Coppola film?

- a) Anthony Hopkins
- b) Keanu Reeves
- c) Gary Oldman

2 Name three of the CDs bundled with the Media Pro 486-33.

3 What can a multi-session CD-ROM drive do that single-session drives can't?

- a) be used more than once before data is erased.
- b) read CD-ROMs which have been written to more than once, such as Kodak's Photo CDs.
- c) read more than one CD-ROM simultaneously.

The rules

● Entries will only be accepted **after** the second part of this competition appears in next month's PC Review

● Only one entry per household, please

● Employees of EMAP Images, Unica and Columbia TriStar Video, their families and associates are not eligible to enter this competition

● All normal competition rules apply and the editor's decision is, as always, incontrovertibly final

Over £2,000 worth of prizes to be won



Drac attack

The Dracula audio, video and games packages contain the following items:

- Dracula, the PC computer game from Psygnosis
- Bram Stoker's Dracula, the Francis Ford Coppola film (on VHS video)
- The Making of Dracula, VHS video
- Dracula, the CD (audio) soundtrack
- Dracula, the role-playing board game

when you've found

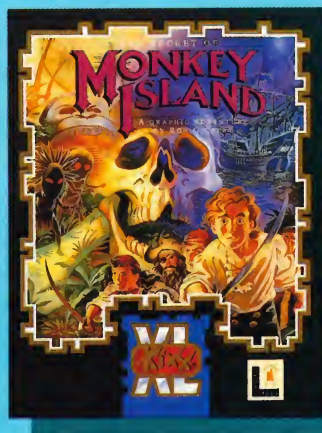
new releases

If you know a great game when you see one - and you recognise value for money - look no further than KIXX XL.

Whether you're a flight sim. addict, an intrepid graphic adventurer or you like to test your wits against a wicked role-playing creature, the KIXX XL collection will spoil you for choice.

KIXX XL offers you games from the world's finest software publishers, including LucasArts, MicroProse, SSI, Access, Delphine and U. S. Gold - names synonymous with quality and state-of-the-art technology, at truly affordable prices.

KIXX XL. When you've found eXcellence... why compromise?



THE SECRET OF MONKEY ISLAND®

A Hilarious Graphic Adventure

- ◆ Features a wide variety of original entertaining puzzles.
- ◆ Cinematic story telling.
- ◆ High resolution graphics and special animation.
- ◆ Point 'n' click interface.

Available for
ATARI ST/CBM AMIGA/PC &
COMPATIBLES 3.5"

R.R.P. £16.99 each



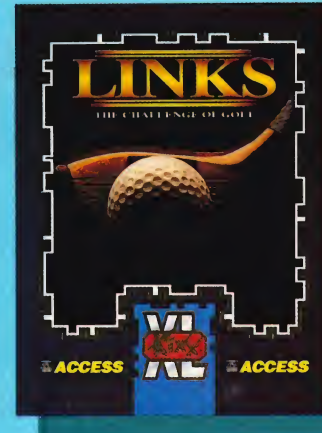
EYE OF THE BEHOLDER

A Fantasy Role-Playing Epic

- ◆ 100% point 'n' click game control.
- ◆ Fully animated encounters with realistic perspective.
- ◆ Control up to 6 characters.
- ◆ A web of intrigue draws you into a totally addictive plot

Available for
CBM AMIGA/PC & COMPATIBLES 3.5"

R.R.P. £16.99 each



LINKS - THE CHALLENGE OF GOLF

Golf Simulation So Realistic, You'll Think You're There!

- ◆ Stunning graphics.
- ◆ Incredible 3-D contoured terrain.
- ◆ Three levels of gameplay.
- ◆ Adjustable golfer's stance and swing plane.

Available for
CBM AMIGA/PC & COMPATIBLES 3.5"

R.R.P. £16.99 each

...why



ROBIN HOOD



NIGHT SHIFT™



CYBERCON III



F15 STRIKE EAGLE II



PIRATES!



F19 STEALTH FIGHTER



INDIANA JONES
and the LAST
CRUSADE™
THE GRAPHIC ADVENTURE



M1 TANK PLATOON

For format availability, please refer to grid on the next page.

The Secret of Monkey Island game © 1990 LucasArts Entertainment Company. Loom game © 1990 Lucasfilm Ltd. Night Shift game © 1990 Project Management Consultancy Ltd and LucasArts Entertainment Company. Indiana Jones and the Last Crusade - The Graphic Adventure and Maniac Mansion games © 1989 Lucasfilm Ltd. Battlehawks 1942 and Zak McKracken and the Alien Mindbenders games © 1988 Lucasfilm Ltd. All rights reserved. Used under authorisation. The Secret of Monkey Island and Loom are registered trademarks of LucasArts Entertainment Company. Night Shift, Indiana Jones and The Last Crusade - The Graphic Adventure, Night Shift and LucasArts are trademarks of LucasArts Entertainment Company. Indiana Jones, Indiana Jones and the Last Crusade, Maniac Mansion, Battlehawks 1942 and Zak McKracken and the Alien Mindbenders are registered trademarks of Lucasfilm Ltd. The LucasArts logo is a registered service mark of LucasArts Entertainment Company. Used under authorisation.

Links - The Challenge of Golf and World Class Leader Board - The Series © Access Software Inc. All rights reserved. Cruise for a Corpse, Another World, Operation Stealth and Future Wars © Delphine Software International. All rights reserved. Knights of the Sky, Gunship, F15 Strike Eagle II, Pirates, F19 Stealth Fighter, M1 Tank Platoon & Midwinter © MicroProse Software Inc. All rights reserved. Midwinter II © Maelstrom Games & MicroProse Software Inc. All rights reserved. Eye of the Beholder, ADVANCED DUNGEONS & DRAGONS, FORGOTTEN REALMS, and the TSR logo are trademarks owned by TSR, Inc. and used under license from Strategic Simulations, Inc. © 1990, 1993 TSR, Inc. © 1990, 1993 Strategic Simulations, Inc. All rights reserved. Cybercon III © US Gold Ltd. All rights reserved. Robin Hood © Millennium/Brainware. All rights reserved. All titles licensed to Kixx. Unauthorised copying, lending or resale by any means strictly prohibited.

* Coming soon (Check with your local retailer or Kixx for availability.) All other titles are available now from all leading computer software retailers: in case of difficulty or should you require any further information please contact Kixx on 021 625 3311. For hardware compatibilities, please refer to the box or alternatively contact Kixx. Prices correct at the time of going to press (August 1993). Kixx reserve the right to change the recommended retail prices without prior notice.

d eXcellence...



CRUISE FOR A CORPSE

Take Part In A High Seas Murder Mystery!

- ◆ Question other characters in true Agatha Christie style.
- ◆ Completely interactive in full 3-D vision.
- ◆ Featuring the Cinematique™ operating system.

Available for
ATARI ST/CBM AMIGA/PC &
COMPATIBLES 3.5"

R.R.P. £14.99 each



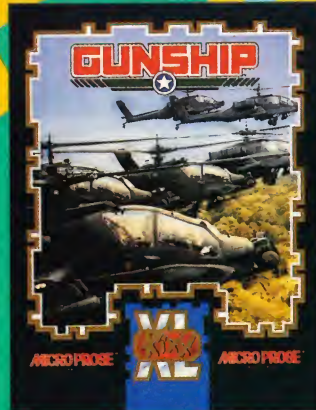
KNIGHTS OF THE SKY

Aerial Combat And Gallantry In World War I

- ◆ Fly 20 planes, every major fighter in W.W.I.
- ◆ Accomplish hundreds of missions in 7 categories.
- ◆ 13 dazzling 3-D perspectives.

Available for
ATARI ST/CBM AMIGA/PC &
COMPATIBLES 3.5"

R.R.P. £16.99 each



GUNSHIP™

Fly The 21st Century Warrior

- ◆ Simulation of high speed, low-level flight.
- ◆ Superb 3-D graphics.
- ◆ Multiple real-life missions.
- ◆ Advanced weapon systems and instrumentation.
- ◆ Hundreds of hours of entertainment.

Available for
ATARI ST/CBM AMIGA/PC &
COMPATIBLES 3.5"

R.R.P. £12.99 each



ANOTHER WORLD

An Exciting Graphic Adventure

- ◆ Features polygon graphics.
- ◆ Special effects offer a "cinema" style of gameplay.
- ◆ Superb music mixed at Delphine's in-house recording studio.

Available for
ATARI ST/CBM AMIGA/PC &
COMPATIBLES 3.5"

R.R.P. £14.99 each

compromise?

KIXX XL - THE RANGE	Format Availability & RRP'S			Clue Books
Title	Atari ST	CBM Amiga	PC & Compatibles 3.5"	
The Secret of Monkey Island™	£16.99	£16.99	£16.99	£9.99
Eye of the Beholder™	-	£16.99	£16.99	£9.99
Links - The Challenge of Golf™	-	£16.99	£16.99	-
Cruise for a Corpse™	£14.99	£14.99	£14.99	-
Knights of the Sky™	£16.99	£16.99	£16.99	-
Gunship™	£12.99	£12.99	£12.99	-
Another World™	£14.99	£14.99	£14.99	-
Robin Hood™	£12.99	£12.99	£12.99	-
Night Shift™	£12.99	£12.99	£12.99	-
Cybercon III™	£12.99	£12.99	£12.99	-
F15 Strike Eagle II	£16.99	£16.99	£16.99	-
Pirates!	£12.99	£12.99	£12.99	-
F19 Stealth Fighter	£16.99	£16.99	£16.99	-
Indiana Jones and the Last Crusade™	£14.99	£14.99	£15.99	£5.99
The Graphic Adventure	£14.99	£14.99	£14.99	-
M1 Tank Platoon	£12.99	£12.99	£12.99	-
Midwinter	£16.99	£16.99	£16.99	-
Midwinter II	£14.99	£14.99	£14.99	£7.99
Loom™	£12.99	£12.99	£12.99	-
Maniac Mansion™	£14.99	£14.99	£14.99	-
Operation Stealth	£12.99	£12.99	£12.99	£5.99
Zak McKracken and the Alien Mindbenders™	£14.99	£14.99	£14.99	-
Battlehawks 1942™	£12.99	£12.99	£12.99	-
Future Wars	-	-	£12.99	-
World Class Leader Board™ - The Series	-	-	£12.99	-

COMING SOON FROM SIERRA

- ◆ HOYLES BOOK OF GAMES VOL I
- ◆ LEISURE SUIT LARRY I
- ◆ KINGS QUEST I
- ◆ SPACE QUEST I
- ◆ POLICE QUEST I
- ◆ QUEST FOR GLORY I

FOR FORMAT AVAILABILITY CONTACT KIXX.

SIERRA



Kixx, Units 2/3 Holford Way, Holford,
Birmingham, B6 7AX. Tel No: 021 625 3311.

Title	Inca II
Publisher	Coktel Vision
Contact	(0734) 303322
Release date	November
Genre	Adventure
Price	£TBA

Inca II

Coktel Vision is gaining a reputation for producing original and impressive games. Now Inca II is here, and it looks as though it could be the best yet

A lot of work has gone into the graphics, as you can see from this atmospheric shot.

I'm not sure what's going on here: I seem to be stuck in a room full of Easter Island statues. Pretty, though.



Inca was certainly one of the more interesting games released last year, combining the traditional legends and customs of Peruvian civilisation with futuristic space combat. Few games give you the mind-blowing opportunity to fly through space in a ship which is shaped like a Peruvian ceremonial dagger, after all.

The quirky mix of action and adventure wasn't entirely to everyone's taste, but it

caused a lot of commotion and interest nonetheless. It is hardly surprising, then, that Coktel Vision has developed a sequel, and that it promises to be even better than the original.

Inca II is set some years after Inca in which you, as Eldorado (stop sniggering), completed your difficult quest to become the Grand Inca. Eldorado is now somewhat older, with a wife, Aclla, and an adult son, Atahualpa.

With the same useful powers which he acquired in the original game, Eldorado rules the four quarters of the Empire, leaving only the ancient lands to be controlled by his trusty arch-enemy, the conquistador Aguirre.

Unfortunately, a mysterious asteroid has appeared out of nowhere, and is threatening the balance of the empire. It has been linked to a number of seemingly natural catastrophes, and so Eldorado

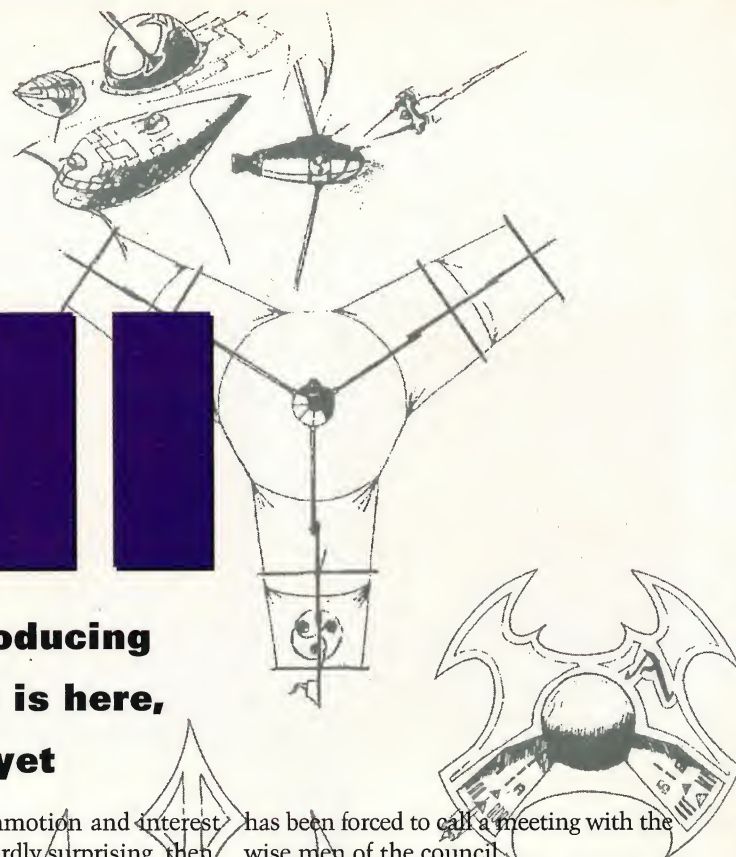
has been forced to call a meeting with the wise men of the council.

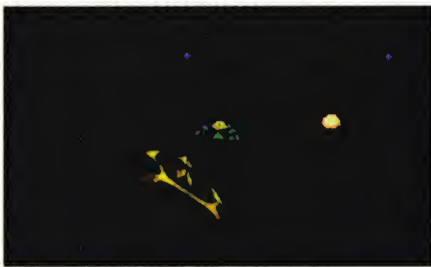
Despite numerous warnings from the wise men, Atahualpa sets off to investigate the asteroid. Will he succeed in freeing the empire of its evil influence, or will his impulsive nature land him in even deeper trouble?

As an adventure, Inca II certainly looks extremely promising. It offers a large selection of mind-bending puzzles all based on Inca mythology. Inca II is fairly non-linear in its approach, which gives you the freedom to choose the order in which you want to solve different parts of the game. There is a lot of variety in the gameplay, whether it's solving puzzles set by the mystic llama, flying through space in pursuit of Aguirre's henchmen, or journeying across the desert in an old steam locomotive.

Although this game is an adventure first and foremost, it contains several space combat sequences. The amazing thing is that the graphics in these sections put a lot of dedicated space combat games to shame. They are, quite simply, stunning. The spaceships have been painstakingly created using 3D pre-calculated graphics and look far more realistic than the polygon-based sprites found in a lot of space simulations these days.

The space combat sequences certainly look very impressive, but what if you're the sort of person who prefers to get through an adventure by solving puzzles rather than going through action phases? No problem. You can choose whether to complete certain stages in the game one





way or the other, which means that you can approach the game from whatever angle best suits your abilities.

It also means that once you have completed the game in a certain way, you can always go back and try another approach if you wish, rather like solving the different paths in LucasArts' Indiana Jones and the Fate of Atlantis.

The length and difficulty of the space combat and action sequences is directly affected by your own abilities, because they are automatically adjusted to the player's skills. If you're weak in this area, less emphasis will be placed upon combat, whereas if you're doing well, the enemies will provide you with even more of a challenge.

Throughout the game, the graphics are of a consistently high standard. Many of the scenes and objects have been hand drawn by a graphic artist, but are so realistic that they appear to have been digitised instead. The superb fractal-based landscapes will make you catch your breath, I promise, and the animations tended to run very smoothly indeed on my 33MHz 486 PC.

The speech will be fully synchronised on the finished version of Inca II, so hopefully the characters won't look as if they're appearing in a badly-dubbed Japanese soap opera.

The whole presentation of the game to date is very slick. As well as having some of the best graphics that I've seen recently, Inca II also boasts a stirring and

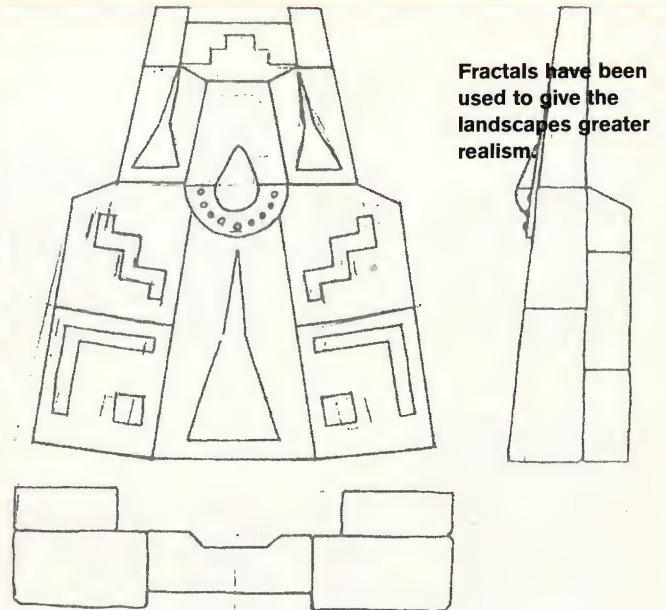
atmospheric soundtrack. It's the sort of game that looks absolutely tailor-made for CD-ROM. If you haven't considered purchasing a CD-ROM drive already, one look at this game is almost guaranteed to change your mind.

So what about the game itself? Inca II appears to have a greater depth of gameplay than its predecessor, but doesn't seem to have sacrificed any of its originality whatsoever.

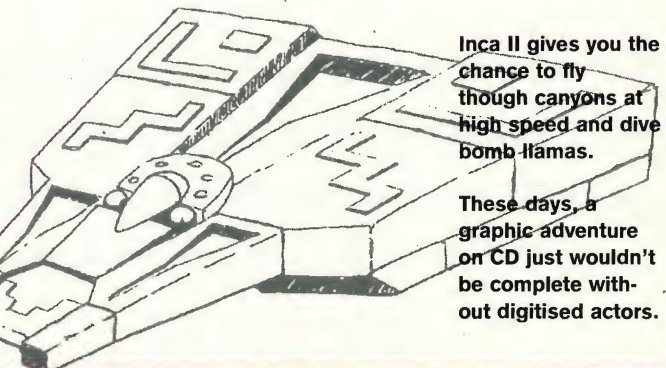
It wasn't quite finished when I saw it, so I couldn't judge whether or not the gameplay would actually live up to its marvellous visuals. What there was looked extremely impressive, however. Having just completed Coktel Vision's Lost in Time (reviewed in Issue 25), I'm definitely looking forward to getting my teeth into Inca II.

Look for a review in either the January or February issue of PC Review early next year. I'm hoping that it'll prove every bit as wonderful as it looks.

■ **Cal Jones**



Fractals have been used to give the landscapes greater realism.



Inca II gives you the chance to fly through canyons at high speed and dive bomb llamas.

These days, a graphic adventure on CD just wouldn't be complete without digitised actors.



Silent Running

After the recent rush of flight sims, everybody who's anybody seems to be programming an underwater game. Dean Evans, not generally known for his aquaphobia, crash dives and sits silently on the ocean floor listening to the ping of the sonar sweep and the distant chug of propellers

SSN-21 Seawolf

Seawolf has a highly realistic sonar room where the identities of the ships can be discerned by listening to the sound of their engines. This screen shows the sound patterns made by a frigate.

Remember 688 Attack Sub? Well, in 1989 this acclaimed submarine sim allowed arm-chair captains to torpedo enemy shipping, crash dive and rig for depth charge attacks without leaving the cosy comfort of the easy chair. Hundreds of people used to get their kicks by sitting patiently on the ocean bed in these claustrophobic metal cylinders, dodging pursuing destroyers and calcu-

lating angles of attack and torpedo running times. Strategic yes, thrilling no.

In 1994 Electronic Arts will release SSN-21 Seawolf, (the sequel to 688) based on the proposed Attack Sub, a hefty piece of US hardware that has yet to reach construction. After a military coup in Cuba and Russia, a rebel Russian fleet has set sail from Archangel towards Cuba. Commanding a Seawolf class submarine you have orders to stop them while insuring that the situation doesn't escalate into a nuclear confrontation.

Seawolf has 33 very difficult missions and like Seal Team you can play these missions individually or plump for the more challenging campaign option which links all the missions together. Featuring the most realistic sonar system I've ever seen in a submarine sim (you can tell the ships apart because of the different sounds they make),



Against the thundery sky, Seawolf uses digitised ships. Sadly what you can't see here is the rolling swell of the ocean.



digitised shipping, over 100 sampled sounds (including the odd burst of whalesong) and intense, often moody gameplay, Seawolf is looking to be a very impressive and very complex strategy game indeed.

Title	SSN-21 Seawolf
Developer	Electronic Arts
Publisher	Electronic Arts
Contact	(0753) 549442
Release date	late February
Genre	submarine sim
Price	£44.99

Aces of the Deep

Forget the highly unoriginal name because Aces of the Deep is a game that aims to do for the U-boat what Aces of the Pacific has done for the humble Corsair. To put it simply: Sierra has taken the same technological and historical detail that made Aces of the Pacific such a big success and has now turned its gaze towards the famous maritime theatre of World War Two.

As you can see by the screenshots, Aces of the Deep uses the same basic game structure as the other Aces titles and like AOTP you can choose to fight for either the Germans, the Americans or the British in both single battles or a full-blown campaign option which sends you half way across the globe.

Featuring detailed polygon graphics, Gouraud shading, digitised sounds and sophisticated enemy intelligence, Aces of the Deep may not look very pretty at first glance, but the polygon-based graphics system makes for a more flexible, if less visually realistic submarine game. If it manages to capture even half the playability of previous Aces titles then Aces of the Deep (the first in a projected Great Warships series) should be a hell of a lot of fun. Definitely a game to watch out for.



If you have played an Aces game before, you'll no doubt recognise the main menu screen. Like Aces of the Pacific, you can take on a single mission or even a whole campaign. There is also the obligatory external preview mode, so you can see your sub.

<i>Title</i>	Aces of the Deep
<i>Developer</i>	Sierra
<i>Publisher</i>	Sierra
<i>Contact</i>	(0734) 303322
<i>Release date</i>	December
<i>Genre</i>	submarine sim
<i>Price</i>	£TBA



AOTD doesn't use digitised images: instead it boasts shaded polygon graphics similar to the aerial games.

Subwar 2050

And now for something completely different. Set in a fictional 2050, you are a freelance submarine pilot who has just been hired by a large, ruthless, world-dominating corporation. The world's mineral resources have become scarce and beneath the ocean waves (where the mining continues) a fierce battle is being fought for control of the excavation rights, using the latest underwater technology.

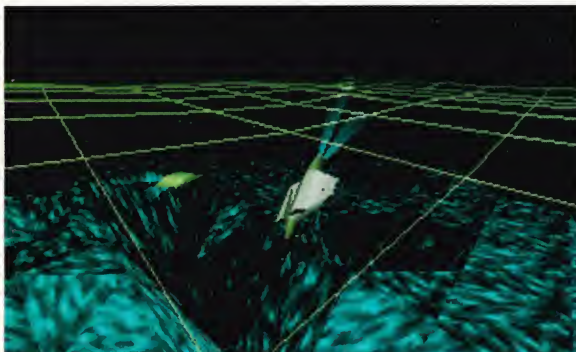
Subwar 2050 puts you in control of a fighter submarine in which you defend your company's territory against attacks from their rivals. From your base on a mothership you will take on missions that vary from simple reconnaissance patrols to covert demolitions, duelling other subs in frantic underwater battles over a stunning textured seascape.

More than just a 'flight sim under the sea', Subwar 2050 creates a whole new genre. There is no sitting on the seabed, no silent running and not a single periscope in sight, just fast, frenzied gameplay in varying shades of turquoise and green. With a variety of missions and campaigns, Subwar is a refreshing shift away from the usual sub game, invoking memories of Leviathan, the Abyss and even Spielberg's new series, Seaquest DSV. Watch out for a review next issue.



Looking left at your mothership: the best way to describe Subwar 2050 is by comparing it to a flight sim. Like a flight sim you get to 'fly' a number of missions, you travel with a wingman and you've also got access to a wealth of nifty external views.

<i>Title</i>	Subwar 2050
<i>Developer</i>	MicroProse
<i>Publisher</i>	MicroProse
<i>Contact</i>	(0454) 326532
<i>Release date</i>	late November
<i>Genre</i>	submarine sim
<i>Price</i>	£44.99



A small one-man fighter sub climbs up quickly through the thermal layer, spotlights piercing the gloom.

Title	Doom
Publisher	ID/Transend
Contact	(0274) 622228
Release date	Early December
Genre	Arcade adventure
Price	Shareware £5 Registered £34.99



DOOM

Top: A quick chainsaw frenzy will give you a fair idea that Doom isn't going to be the most politically correct game the world has ever seen.

Far right: having an itchy trigger finger is definitely going to be an advantage in Doom, unless you want to end up like the corpses on the wall in the bottom picture.

Shareware has its fans, but it's still rare to find a shareware game that can compete on an equal footing with the best full-priced commercial stuff these days. This is largely because of the massive expense involved in producing today's graphically-lead epics. But ID and Apogee managed it with Wolfenstein 3D in its time, and, if first looks are anything to go by, Doom is well on the way to doing the same – if not even better.

Doom is not the sequel to Wolfenstein 3D (Apogee is still working on that, with rumour has it, two designers poached from Origin who were involved in the creation of Ultima Underworld 2). Doom is being developed solely by ID. But it does use an improved version of the 3D game engine in Wolfenstein, and the style and atmosphere of the game are very similar, minus the Nazi paraphernalia and with greater variety.

So, you still view your grim surrounding from a first-person 3D perspective, your favourite gun held firmly in front of you, and move and turn in any direction with the cursor keys.

The speed with which the game pans the view round and rushes forward and back is nothing short of remarkable. Yes, Wolfenstein could do it, but Doom is carrying that much extra baggage, because the complexity, detail and texture of the 256-colour graphics are easily comparable with any state of the art commercial game. Yet where they struggle to shift the screen along, Doom simply flies even in this beta stage of development.

The aim of the game is essentially very simple: stay alive and progress through the levels, picking up new weapons (shot-guns, chainsaws, mini-guns, etc), ammunition and medicine as you go. But the presentation is very sophisticated, including a built-in auto-mapper, hidden doors, traps and switches and, in theory, a multi-player network game option that could prove to be an absolute riot of blood and mayhem.

Ah, yes, 'mayhem'. How could I possibly neglect to mention Doom's other

rather 'endearing' character? It's absolutely brimming over with gore from start to finish. Five seconds into the game and there's blood and corpses everywhere as you launch into a chainsaw frenzy. It looks like being great, politically incorrect fun, but it's also the sort of game which you really don't want to buy for your kids — in fact, it may well end up with a parental warning sticker in the States on this account.

Doom will be available on shareware release from Transend for a mere £5 from the end of this month. If the finished article manages to deliver what it promises in the current beta versions, it's going to be one hell of a game indeed. How commercial games publishers can carry on producing block scrolling RPGs and selling them as 'state of the art' when Doom moves like this for five quid is completely beyond me.

■ John Bennett



Title	Digital Love
Publisher	Mindscape
Developer	Hex
Contact	(0444) 246333
Release date	End November
Genre	Aid to relaxation
Price	ca £25

DIGITAL LOVE

Digital Love is the misleadingly exciting title of a CD-ROM aid to relaxation. The idea is to reduce your stress levels using various software modules.

These programs use standard relaxation aids, such as gently moving coloured patterns with accompanying mood music, chanting — yes, you get to chant along with your CD — yoga-style exercises depicted on screen for you to follow, and colour therapy. Rather than diligently working your way through the lot, the idea is that you should spend ten minutes every so often 'using' the module which suits you best to wind down from the stresses of everyday life.



There are six different versions of the kaleidoscopic patterns, which change slightly each time you view them, to retain your interest in the pattern itself. The chants are of the long drawn-out "OMM" variety; the colour therapy really is simply showing big blocks of colour on-screen: the colour therapy experts insisted that adding any high resolution visual interest would defeat the object of the exercise. The yoga exercises concentrate on standard neck and shoulder muscle flexing.

So far, the only stressed-out PC Review member to have tested an early version of Digital Love is me, possibly the biggest sceptic in the world when it comes to this sort of thing. Wired up to a brain wave monitor, I sat through the kaleidoscope part of the program. Brain wave activity was subsequently shown to have descended to pretty well nil within seconds of the module starting, which is fairly impressive, although I hope this isn't just an indicator of my normal state of mind.

Actually, there is nothing in Digital Love that is controversial: all the modules — even the chanting — are examples of well-established relaxation techniques. But having the program set up on the computer may simply encourage the over-stressed to use it regularly rather than resorting to a quick arm stretch every so often.

■ **Christina Erskine**



NODDY'S™ BIG ADVENTURE

Noddy's Big Adventure is the sequel to the highly successful Noddy's Playtime. It takes children to the North West corner of Toyland and includes 13 different programs to educate and entertain children for hours on end.

This graded creativity and entertainment package is specifically designed for 3-7 year olds and relates to the early requirements of the National Curriculum.

Drive with Noddy in his car, pick up passengers along the way and visit many exciting locations.

- Kitchen Fun - sequencing, colour and shape matching and vocabulary
- Noddy's Scales - number matching through to addition
- Tricky Trees - memory, sequencing and the language of colour and shape
- Can you Find me? - shape and colour recognition
- Bert's Scrapbook - sequencing and reading skills
- Beach Sorter - sorting
- Picnic Attack - water fun game

Junior Word Processor - this excellent utility develops story telling skills. Its scope is outstanding and features many facilities found in 'grown up' word processors. There is also a word game in each level to create an element of fun.

Available for: Amiga, Acorn Archimedes, PC and PC Windows.



NODDY'S™ PLAYTIME

Noddy's Playtime added a new perspective to educational games, the outstanding value from this extensive package has set new standards of parental expectation in this important area of software based on learning with fun.



Drive around Toy Town, explore exciting locations and learning programs and a full Junior Art Package packed full of creative fun. Designed for 3-7 year olds.

Available for: Amiga, Acorn Archimedes, PC and ST.

PLAYTIME & BIG ADVENTURE TWICE THE LEARNING EXPERIENCE



THE JUMPING BEAN CO.

Leen Gate Lenton Nottingham NG7 2LX
Tel: 0602 792838 Fax: 0602 780963

Available from: Boots, Currys, Dixons, Escom, Future Zone, Game Ltd, John Lewis, John Menzies, PC World, Ryman's, Tandy, The Computer Store, Virgin and many specialist outlets.

Original Text and Images © Darrell Waters Ltd 1949/88. Text and Images of BBC Television Series © BBC Enterprises Ltd 1992. Licensed by BBC Enterprises Ltd. NODDY is a trademark of Darrell Waters Ltd and is used under Licence. ENID BLYTON (signature logotype) is a trademark of Darrell Waters Ltd and is used under licence.

How to buy a PC



Buying a home PC? Dean Evans and John Bennett set out a specification and put six of the latest 486s to the test

Buying a home PC must rank as one of the single most expensive ways of handing a lot of money to a complete stranger — after the house, the car and the kids, that is. So it's not the sort of decision you want to make unless you have a fair idea that what you're getting for your money is what you actually want.

But just look at the number of adverts clamouring for your attention, the number of machines of all shapes and sizes in the shops, and all that jargon that surrounds anything mechanical. How on earth do you choose the right machine for you? How much do you have to spend? Who do you trust?

To a certain extent, the answer to the first two of these questions depends very much on what you want to do with the PC. The problem is that not many people know *exactly* what they want it to do right now, let alone in six months.

It's easy if all you want is a spot of word processing, a bit of home accounting, and little else. In that case, you don't need a massively powerful PC. A simple 386, costing around £500 to £600 should do the trick.

Similarly if you want a PC capable of handling some high-faluting, specialist software — say a massive database, video editing or CAD, for example — you know it's going to cost you a fair whack because you'll need a state-of-the-art machine.

But what about the middle ground? A good PC has to be something that'll do the basics without costing the earth, runs Windows without suffering the PC equivalent of a heart attack and can tackle the latest monster game from the likes of Origin. It also needs to be reliable and 'future-proofed' so that it'll still be able to do this in a couple of years' time without you having to spend a fortune upgrading it.

So, what we've set out to do here is to provide a sensible specification for a home PC, for both leisure and work purposes, and to put to the test some of the most readily available high-street PCs that fall into this category.

To start with, here's what we'd recommend:

● A 25MHz 486SX, or 33MHz 486DX PC

There's no point buying less than this. Most companies are going to stop selling 386s anyway, and a 486 is the only sensible choice to cope with today's software. The 33MHz 486DX is preferable, being the more powerful PC, but there's not that much in it and your choice must be dictated by how much money you want to spend.

● 4Mb of RAM

Realistically, this is the minimum for running Windows applications and the bigger games these days. Extra RAM improves performance considerably, so if you can get a PC that comes with 8Mb of RAM, count your blessings.

● A medium-sized desktop, or midi-tower (upright) casing
The smaller cases may look ever so dinky, but they are a real liability when it comes to adding extra cards or peripherals to the PC. The choice between desktop and tower is entirely personal and usually depends on how much desk space you have.

● A 14" Super VGA colour monitor

This is pretty much the standard by now, and you shouldn't accept anything less. If the PC comes with a 15" monitor, so much the better.

● A mouse and keyboard

These should be included in the price — they're not supposed to be optional extras!

● A 1.44Mb 3.5" floppy disk drive

Again, this should be standard nowadays.

● A 120Mb hard disk drive or greater

Software takes up much more room on average than it did a couple of years ago, so it's important to have as much hard disk space as possible. If you add just a few well known applications and a couple of games you'll soon see that space disappearing at a rapid rate of knots. Put together DOS 6.0, Windows 3.1, Word for Windows 2.0, CorelDraw 3.0, Ultima UnderWorld 2 and Lemmings 2, and you've already kissed goodbye to 70-odd megabytes. Ouch...

(Note that DOS 6.0's DoubleSpace utility is still suffering from the odd technical hitch, particularly with games.)

● Bundled software

Windows 3.1 and DOS 6.0 should be pre-loaded on your PC, and there's no excuse why these shouldn't be included in the overall price. You should also realistically expect some sort of general purpose software bundle with your PC. This is unlikely to be the most powerful stuff available, but it will set you up with perhaps a word processor, a spreadsheet and a DTP package, which will do the job for now. You might also be supplied with a game. Buying software separately can be a very expensive business.

There are obviously a lot of extras you can add to this basic specification, like a sound card or CD-ROM drive, for example. If you can get a PC with these included in the price, so much the better. But make sure you aren't cutting corners on the quality of the actual PC, because sound cards and CD-ROM drives aren't that expensive (from around £89 and £149 respectively) and they aren't that difficult to install by yourself at a later date.

And the price you have to pay for a PC that fits this particular bill? Well, a ceiling of around £1,200 should have it all covered, and in many cases leave you with a fair amount of cash to spare, so that's the limit we've placed on all the PCs we're reviewing later on.

Who do you buy from?

Some people might say that this price limit is too high, that it is in fact easily possible to get PCs to our specification at nearer the £800 than the £1200 mark. This is perfectly true, and although we've chosen six PCs to review, it could just as well have been 60, because there are easily that many out there that fit the specification.

But selling PCs is a cut-throat business, and some manufacturers will cut all sorts of corners if it gives them a better chance to get at the money in your pocket. Look carefully at a 'bargain' PC, because you really do pay for what you get. If someone's offering a 66MHz 486DX with all the trimmings for a ridiculously low price, it's a fair bet that it's not the best made PC the world has ever seen and unlikely to work for very long.

Not only that, but how reliable are some of these suppliers? After all, you can buy your PC from a shop, by mail order or have it custom made from scratch, but in the past year a num-

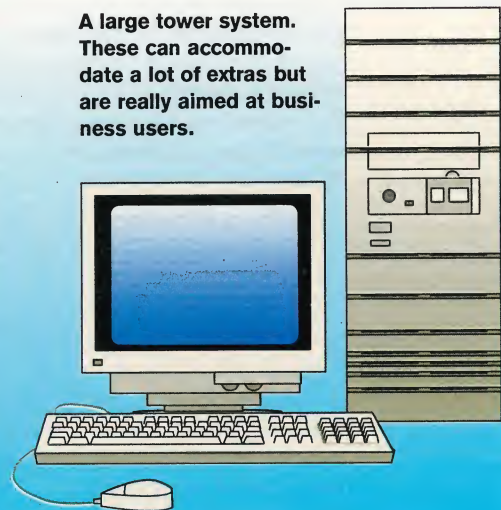
A standard desktop PC. You can also get mini and slimline desktop machines.



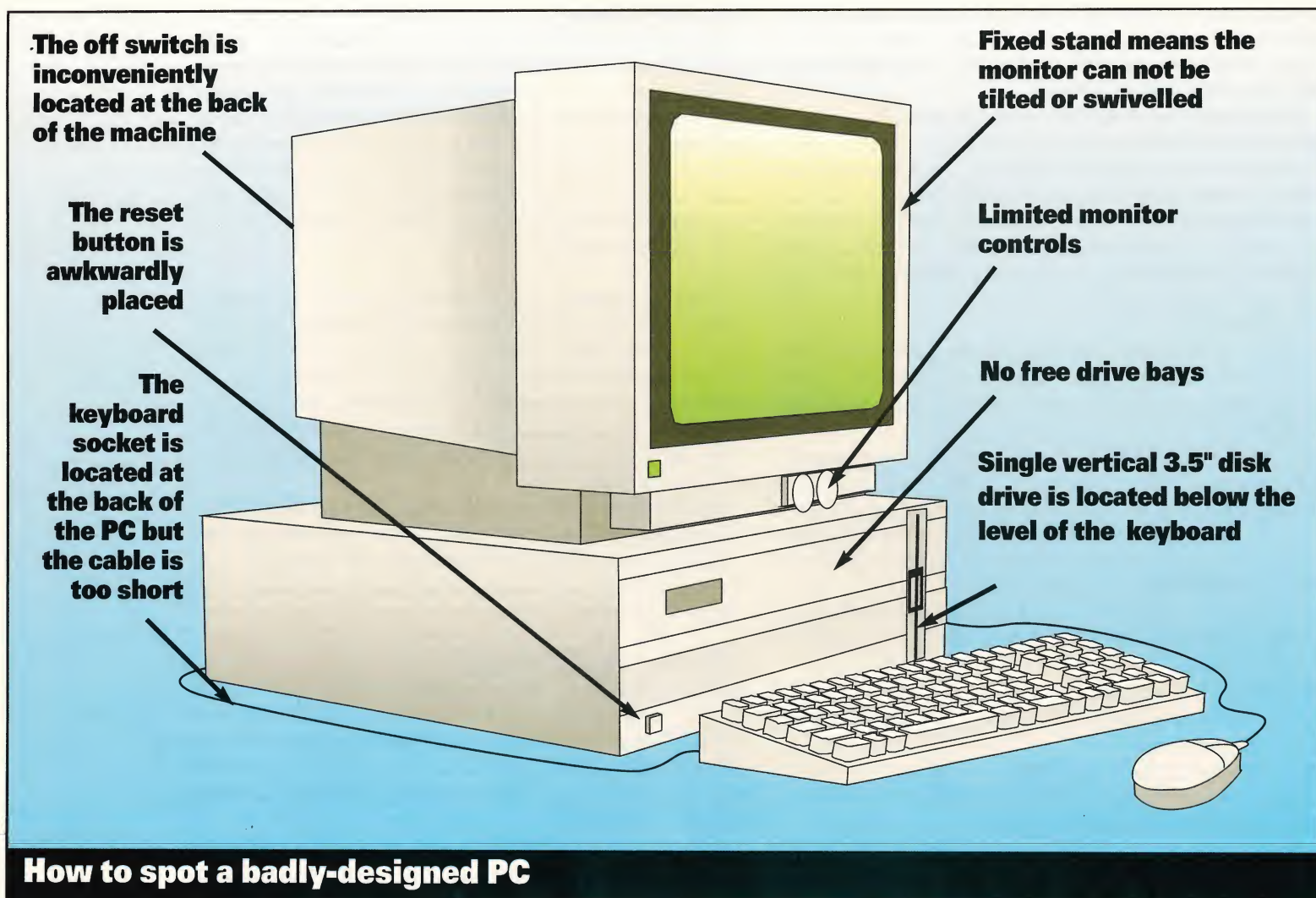
A midi-tower system is a simple alternative to a desktop casing.



A large tower system. These can accommodate a lot of extras but are really aimed at business users.



PCs come in all shapes and sizes. A good basic rule is to avoid the really small cases unless you're absolutely pushed for space, because they are very difficult to get inside when you need to, and they are always limited in terms of expansion possibilities.



ber of relatively large mail-order suppliers have gone under (such as MJM, Ti'ko and Olympus) leaving people either out of pocket or with a PC and no visible means of support.

There are many perfectly reputable suppliers out there, but if you're not confident that you know exactly what you want, you may not want to buy 'blind'. Hence, we've opted for a range of PCs that are all available in the high street. There are other manufacturers, both direct and retail suppliers, such as Opus, Viglen, IBM, Elonex, Dell and Dan which also come highly recommended by many users.

What's next?

OK, so that's set out a specification and a price range, and here we have six typical high-street machines that fit the bill.

So what are we looking for in them? First and foremost, we're looking for a PC that's easy to use and reliable — "trouble free motoring" is probably the best way to describe it. Your PC should work from the word go, and perform consistently. It should be easy for a complete novice to set up. And, if the unthinkable does happen, it should come from a manufacturer who'll still be around to take care of the problem.

On top of that, we're looking for a well-made, intelligently designed, quick PC that's reasonably 'future-proofed' (ie, it won't be completely obsolete two minutes after you get it through your front door).

Good design does not mean jazzy styling — you're not going to pay £200 more just because a PC has a go-faster stripe down the side or pretty lights (mind you, that's why I bought my hi-fi, but we've all got our cross to bear).

What good design means is that all of the important functions you need to get at are sensibly and clearly placed. What may seem like a minor quirk of the PC's design can turn out to be a real curse when you've been working with it for a while — simple things, like an awkwardly placed disk drive, an on/off switch at the back of the PC, or a fiddly reset button. Put a couple of these together and you've got a PC that'll drive you bananas in no time. For example, we've come across several PCs in the past where the games port is so close to the edge of the panel that it can't take a joystick connector with two screws either side — as most analogue flight sim sticks do — and you have to resort to a hacksaw to make the connector fit. So, when you're looking at buying a PC it's always worth giving it a quick once-over to see if you can spot these sorts of irritations.

Expansion

The internal design of the PC is very important to you in the long run (unless you're never going to delve inside the box) and we've placed a lot of emphasis on this in the reviews.

The chances are you may want to add something to your PC at a later date. It could be related to performance — like a bigger hard disk or a better video card. It could be work-related, like a fax or modem. Maybe it's games or music-related and you need to add a CD-ROM drive or a sound card. All of these things need to be installed inside your PC — and you've got to do it — so the PC has to have enough room inside it.

A good rule of thumb is never to buy too small a PC unless you're absolutely certain that it's got what you want. There's nothing worse than trying to fit a new drive and finding that

you'll never reach the screws under the main plate without an L-shaped screwdriver and triple-jointed fingers.

The larger cases will usually give you more room to expand your PC and to work inside it, but this can still be deceptive. We had one PC in the office recently, a Packard-Bell Legend 486, which had a hidden metal plate welded across the drive bay into which we were trying to install a CD-ROM drive. Why this is, God only knows, but it is the kind of surprise you can well do without.

You can always make a rough estimate from looking at the front of the PC to see how many drive bays appear free, and count the number of metal expansion slot covers at the back of the PC.

Unfortunately, you don't get much chance to poke around inside a PC while standing in your local computer shop so the only way to be sure is to ask the sales assistant for a specification sheet for the PC or to check the details carefully in the advert. What you are looking for is a minimum of at least one free drive bay, and at least three free expansion slots.

Upgrades and performance

Nobody wants a machine that's going to be obsolete, and because computer technology moves on probably quicker than anything else bar the cost of living, it's vital that you can upgrade the PC you buy.

There are two main elements of the PC you will want to upgrade eventually; the RAM and the processor.

RAM is simple (or it ought to be, anyway). To add more RAM you simply buy more SIMMs (Single In-line Memory Modules) and clip them in to the slots on the motherboard. The first thing you need to check about the PC you're going to buy is whether it takes proprietary SIMMs (meaning you can only buy special ones from the manufacturer) or standard SIMMs (so you can shop around for them yourself). The second thing you need to know is how many megabytes you can upgrade the RAM to: 12Mb is a bit sparse, 20Mb is more than enough, and 64Mb is overkill.

On the processor front, you should be able to upgrade a 486 PC all the way to a super-fast 66MHz simply by replacing the

Things to do when buying a PC

- Always pay by credit card if at all possible. If that's not possible, then a crossed cheque or cash on delivery is the next best bet.
- Try to find out details of the company's background, and be particularly wary of Post Office box numbers on adverts.
- Some manufacturers are members of a standards organisation which offers you a degree of protection.
- Check the warranty and support arrangements that come with the PC. Find out if the support deal is insured if the supplier goes bust.
- Confirm exactly what you are buying and the price, stating all the details in writing and keep copies.
- Make sure the advertised price includes all of the bits you need.
- Check the delivery date.

chip. This is partly why we haven't placed so much emphasis on sheer speed in the reviews, because it is a relatively easy and inexpensive job to upgrade your processor if you need a bit more oomph at a later stage. Any PC that doesn't allow you to do this simply isn't worth buying these days.

To make the job of upgrading a chip easier, a Zero Insertion Force (ZIF) socket is a big bonus in a PC. Simply put, it's a levered chip socket that allows you to pull out the existing chip and replace it with a new one. It's about as difficult to use as a Lego set. A Low Insertion Force (LIF, not surprisingly) socket is less common, and not as easy to use. Otherwise, chip extraction and replacement is best left to the manufacturer — which costs money.

As well as going up to a 66MHz 486 chip, some PCs have the option to upgrade even further to a Pentium OverDrive (P24T) chip. This is a half-way house between a 486 and a full-blown Pentium PC. If you look at a chip socket with this capability, you'll see an extra ring of pin-holes around it waiting for the larger Pentium OverDrive. But, since the P24T won't be around for quite a while yet, you should take this ability with a pinch of salt — there's no guarantee it'll work when the chip does become available.

This brings us finally to the thorny question of PC performance. Obviously, it is important. You don't want to buy a PC only to find that it takes ten minutes to make up its mind when you ask it to do something. But, out and out speed is not the be-all and end-all when it comes to buying a home PC.

For a start, it's very difficult to measure accurately. You'll see umpteen adverts for PCs boasting assorted benchmark speed figures. But, these are often ridiculously misleading. So many factors are involved in the set-up of a PC that practically any set of tests you use will favour one configuration over another. What's more, these tests can rarely be made to represent what you actually intend to do with the PC day in and day out.

This is another reason why in the reviews that follow we've really only commented on a PC's performance (in terms of speed) where it has been either noticeably good or markedly bad. All of the PCs that we have reviewed here should be more than adequately fast when it comes to handling any standard Windows application, and when playing the latest, and the biggest of today's games.

But just for the record, the factors that decide the performance of a PC are: the type of processor (386, 486 or even Pentium), the speed of the processor (measured in megahertz [MHz]), the type of video card, the speed of the hard disk (access times), the amount of RAM, and disk cacheing. And — importantly — prices quoted include Vat.

It's all gone horribly wrong ...

The 1979 Sale of Goods Act makes three major distinctions about the state of goods — in this case PCs — being sold:

- The goods should be of merchantable quality
- The goods should fit the purpose they were bought for
- The goods should be as described by the retailer

If something major is wrong with your PC when it arrives, then phone to complain immediately, and follow this up with a written complaint (keep a copy yourself). You'll be entitled to a full refund because the goods aren't of a merchantable quality. But remember — if you accept a repair you may lose your right to a full refund at a later date.

Useful contacts

Consumer's Association (071) 486 5544
Office of Fair Trading (071) 242 2858
or, contact your local office for the following:
Trading Standards Dept
Consumer Advice Centre
Citizens Advice Bureau



**33MHz processor,
130Mb hard disk,
2Mb of RAM, 3.5"
disk drive**
Tel (0277) 228
888
Fax (0277) 211
350
Price £869.99

4

Amstrad PC7486SLC-33

Of all the PCs we looked at this was by far the smallest of the lot. On the neatness side of things this is all well and good, and the Amstrad has a lot going for it if you're pushed for desk-space. However, it does leave you absolutely stuffed when it comes to upgrading it in the future and adding useful extras.

This makes it rather difficult to take a machine like this seriously as a PC, since the potential is so limited. Free drive bays are non-existent — so it's impossible to add an internal CD-ROM drive, for example.

Expansion is not quite so bad, but still very limited. By a clever bit of engineering, Amstrad has managed to fit most of the bits on to the motherboard that you'd normally find on expansion boards, thus leaving you a marvellously generous two free slots to play with. Yeah, right. Two slots, and precious little room to work round them. All you have to do is add a sound card, for example, and chances are this will probably obscure the other slot and render it useless.

To add to that there are a few strange quirks of design, like the fact that both the keyboard and the mouse connect into the *bottom* of the PC. This may seem like a harmless eccentricity, but it actually turns out to be quite a pain in the long run.

But on the whole the Amstrad's performance can only be described as adequate at best. The Cirrus Logic-driven graphics card is a good performer, and, somewhat unusually, the Amstrad is powered by a Cyrix 486 SLC chip (it runs externally at 16-bits — like a 386 — and at 32-bits internally, like a 486) which again produced reasonable results. The problems with running Windows and games are largely because of the lack of RAM — 2Mb just isn't enough to start with any more — and the PC really struggled with the bigger games.

So, if you're seriously considering buying this PC, then it's because you want to have as little to do with it as possible and aren't going to put it under any great strain. Ask it to do something new, dabble with the configuration, add new hardware

or even fairly standard Windows software and the results can be very unpredictable to say the very least.

In its favour though, the Amstrad 486SLC is very cheap and it is very simple to get to grips with. The machine boots up — not into Windows — but to its own, very easy to understand, program manager. It's a simple menu system which allows you to get at all the installed software and a set of online tutorials, and on this score the Amstrad deserves full marks. You also get DOS 6.0, Windows 3.1 and the PFS Windows Works integrated package bundled with the PC, and one year's on-site warranty. In short, the Amstrad is easy to use, good value for money but underpowered and very limited in the upgrade and expansion departments.

**25MHz 486 SX
PC, 100Mb hard
disk, 4Mb of RAM,
3.5" disk drives**
Price £1,199
Tel (081) 332
3000

7

Compaq Presario

Compaq's new Presario range is quite a radical about-turn for a company that has been chiefly known for its expensive — admittedly high quality — corporate PCs. But, like so many of the big guns in the PC business these days, Compaq is making a concerted effort to crack the home PC market and hence this new style of PC.

The most distinctive thing about the Presario 486SX/25 is its design, which puts the entire thing, monitor and all, in one box. If you want to be cynical, someone at Compaq has obviously decided to take a few leaves out of Apple's book, because that's what the Presario resembles most closely in style and finishing.

That in itself is meant as a compliment, and there's no denying it's a rather attractive machine. But, the main aim is to provide a full-function, no-compromises PC that can sit unobtrusively on a desk with the minimum of cables, and in this respect the Presario is a qualified success.

On one hand, it is extremely well-made, with a very crisp display from the built-in monitor, an energy saving power-down feature and compliance with EEC rulings on PC health and safety. It's also a good performer (again using the Cirrus Logic graphics chip), and the processor can be upgraded to a 66MHz DX2 chip and RAM to 20Mb.

It is also very easy to use. Compaq has really gone to town on this, combining on-line tutorials (the naaffly-named 'Compaq welcome centre' and a built in teaching game to show you how to use the system. Add to that DOS 6.0, Windows 3.1, and ClarisWorks (an integrated package), Mario is Missing and Compaq GrandSlam Tennis, and it makes an impressive bundle for first-timebuyers.

However, the 100Mb hard disk drive is the bare minimum we'd recommend, and since the monitor and the system box are



all one unit — in fact the whole thing will arrive on your doorstep in a single box — there are a couple of other drawbacks. Firstly, you can't tilt or swivel the display, and secondly, the Presario is as limited as the Amstrad in terms of its expansion possibilities with only two free expansion slots and no free drive bays (which effectively rules out an internal CD-ROM drive).

33MHz DX,
240Mb hard disk,
4Mb of RAM, 3.5"
disk drive, 16-bit
sound card
Price £1,099
Tel (0294) 222
600

6

is beautiful' idea a bit too far — it really is a tank. But although this means that it needs plenty of desk space, it has the advantage that it gives you ample room to expand the system with six 16-bit expansion slots and three free drive bays. This should provide more than enough room for the future.



That could prove to be vital because the Escom 486 is altogether a rather average performer, and certainly nothing special for a 33MHz 486DX. But then it does get the job done, it has a whopping great 240Mb hard disk, and we've had absolutely no problems with it running both games and Windows applications.

Both Windows 3.1 and DOS 6.0 are pre-loaded on the PC, which comes

with a one year return to base warranty and 90-days free hotline support. There's nothing that makes this machine particularly easy to use — no on-line tutorials and the like — and there's no software bundle, but this is offset by the inclusion of a 16-bit sound card and a nifty set of speakers complete with obligatory matt-black stands.

Evesham Micros Vale Popular

Like the Escom, the Evesham Vale is a solid if uninspiring 486 based machine, a ready-to-go multimedia package fitted with a sound card and CD-ROM drive as standard.

The Evesham is a hefty desktop machine, rivalling the Escom for the coveted 'tank of the year' award. The rather ordinary front panel sports the reset and turbo buttons and there is one vertically-mounted 3.5" disk drive and the CD-ROM drive while the monitor supports 1,280 x 1,024 resolution.

Inside there's a lot of fresh air, with the power supply and cards dwarfed by the size of the casing.

Although the case is roomy there's a lot of messy cabling which hides and restricts access to the SIMM sockets. But if you can get to the

33MHz 486DX,
214Mb hard disk,
4Mb of RAM, one
disk drive, CD-
ROM drive, 16-bit
sound card
Price £1,019
Tel (0386)
765500

6

Three of the most exceptional Space Simulations ever!



• Megatraveller 1

"There can't be a more prestigious role-playing system than Megatraveller 1".

PC Plus

• Elite Plus

"Quite simply the most original gameplay since the birth of computer entertainment. An all time classic".

PC Format

• Wing Commander

"This is more than ever an essential addition to any self-respecting PC gamer's collection".

PC Review

The Complete Space Experience for IBM PC and Amiga

*Elite on Amiga versions

ELECTRONIC ARTS

MICROPROSE

ORIGIN

empire

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA.
Telephone: 081-343 9143

Empire Software is a registered trademark of Entertainment International (UK) Ltd.



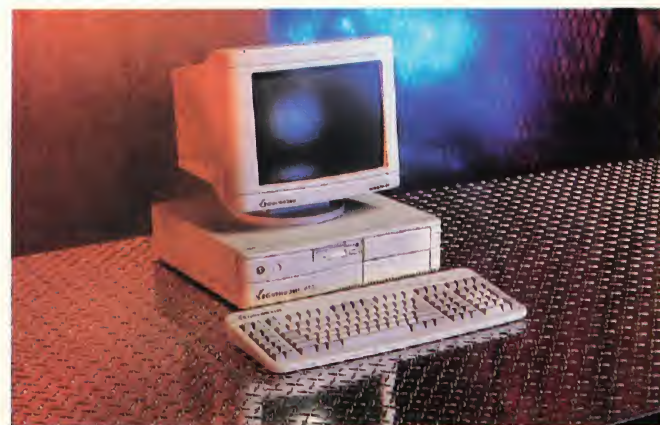
SIMMS, there are four free slots that allow you an immense amount of room for memory expansion.

Despite this sloppy finishing, the expansion potential is good and the Evesham has ample room; one free horizontal 5.25" drive bay and five empty expansion slots. Although there's plenty of room to get at the three free full-length slots, the two half slots are almost impossible to reach due to the jumbled mass of I/O cabling.

Neat and tidy are two words that don't spring to mind about the Evesham. Apart from the tangled cables, there are supposed to be two vertical bars, included to give the case some rigidity. Unfortunately one of these was missing and the other was loose, and I suspect if it had been fixed it would almost certainly have restricted access to the last expansion slot.

But as it is the Evesham performs quite well and since it's been sitting in the office it has coped with the likes of Privateer, Return to Zork and The 7th Guest. The hard disk is painfully slow at times and the machine has crashed a few times under Windows, but for no reason I can safely put my finger on.

All in all, the Evesham is an average machine that doesn't really excel at anything. It boasts a large case that it really never takes full advantage of, but comes complete with DOS 6, Windows 3.1, and Star Trek 25th Anniversary pre-installed plus various CD-ROM programs. Buying an Evesham also gets you a one year on-site warranty and access to the Evesham technical support hotline.



**33MHz SX PC,
170Mb hard disk,
4Mb of RAM, 3.5"
disk drive
Price £899
Tel (0800) 602
000**

8

Gateway 486SX/33

Gateway is new in the UK, having just arrived from the States where the company is the largest direct-seller of PCs. It looks like we're about to be saturated with a vast array of Gateway PCs.

This may not be such a bad thing though, as the PCs are certainly very competitively priced and the 33MHz 486SX ranks as one of the best designed and finished PC here.

A 33MHz SX is an unusual processor to offer, and in all likelihood it is largely for pricing reasons, because all it amounts to is a 386DX minus the co-processor. Still that and the local-bus disk controller do give the Gateway 486/33SX a significant edge in power over equivalent 25MHz 486s.

As we said, the PC is distinctively styled and finished on the outside, and the same is true of the internal workings. Like the Amstrad, Gateway has opted to put a lot of the gubbins you

Checklist for buying a PC

Item	Comments and options	Recommended	Item	Comments and options	Recommended
Basic spec			Upgradability		
Compatibility	Is it a 100 per cent IBM-compatible PC? (This doesn't mean you have to buy from IBM.)	IBM compatible	Processor	To 66MHz or Pentium OverDrive	To 66MHz
Processor	286, 386 or 486 (SX or DX)	486SX or DX	Expansion	Slots for adapter cards for video, scanners, faxes, etc.	Min 3 free
Speed	20, 25, 33, 40, 50 or 66MHz	25 or 33MHz	Drive bays	Free space to fit extra floppy or CD-ROM drives, etc	Min 1 free
Hard disk size	How much in megabytes (Mb)? The amount of room on the PC to store your files.	120Mb	RAM upgrades	Increase memory with standard SIMMs	SIMMs up to 16Mb
RAM	Also in megabytes, this is memory that is faster for software to access which improves performance.	4Mb	Should be included in the price		
Floppy drive	3.5", 5.25" or both	3.5"	Mouse		
Monitor	EGA, mono VGA, VGA or SVGA. Monitors come in a range of sizes, from 7" mini screens to 21" monsters and larger.	14" Super VGA	Keyboard		
			Windows 3.1		
			DOS 6.0		
			Other bundled software		
			Warranty options		
			On site		
			Return to base		
			Free telephone support		

normally find on expansion cards directly on to the motherboard. This means that inside it's a very clean and uncluttered layout, certainly the best of these machines, with masses of room; five free expansion slots, although two of them are a little cramped, and one free drive bay. Credit must also be given for the processor upgrade facilities with a ZIF socket and a Pentium OverDrive option.

The only irritation is that the monitor, which is extremely good in terms of both clarity and controls, is let down by the fact that it needs its own power cable and won't run from the PC power supply. Not a brilliant state of affairs, but hardly critical.

The keyboard is also a bit of an oddity: it includes extra keys for scrolling diagonally and two sets of function keys so you can program them with simple macros.

Other than that, this PC makes a very good value for money all-round PC. Support seems to be better than average, with a lifetime freephone support hotline, one year return to base warranty and 30-day money-back guarantee. Bundled software includes DOS and Windows, QA Plus (diagnostics) and Microsoft Works.

**25MHz 486SX
PC, 200Mb
hard disk, 4Mb
of RAM, 3.5"
disk drive.
Price £1,291
Tel: (081) 874
1100**

Virgin EuroMagnetics series-E PC

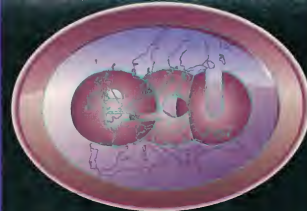
Richard Branson and Virgin have launched themselves into the PC market with a media-grabbing 'green' PC. But the green tag is the only thing that gives this average machine any real interest.

The standard Virgin E-series PC itself is reasonably slim affair, while the monitor is much bulkier. Inside there isn't much in the way of space and as a result the machine only has three horizontal expansion slots. However, all I/O ports (serial and parallel) and even the graphics chip are mounted on the motherboard.

The machine performs fairly well although there is nothing about it that is worth getting up and shouting about. The 486 processor sits in a LIF socket — the manufacturer maintains that it is P24T compatible — and the whole package comes with Dos 6 and Windows 3.1 pre-installed. You also get a box of pre-formatted Virgin disks, the Virgin mouse mat and a software-based disk cache utility called FAST.

The machine performs fairly well although there is nothing about it that is worth getting up and shouting about. The 486 processor sits in a LIF socket — the manufacturer maintains that it is P24T compatible — and the whole package comes with Dos 6 and Windows 3.1 pre-installed. You also get a box of pre-formatted Virgin disks, the Virgin mouse mat and a software-based disk cache utility called FAST.

As for it's 'green-ness', Virgin claims that the E-series uses 65 per cent less power than standard PCs with typical power consumption when idle a mere 40 watts compared to up to 200 watts in non-green PCs. The 14" IBM-produced colour monitor is notable for its power-down capability which reduces output down to an impressive six watts. Finally, this deep shade of 'green' has been achieved by reducing CFC use to a minimum and shipping the PC in both recycled and environmentally friendly packaging.



**europaen
computer user**

**FREEPHONE
0800 318576**

Fax: 0480 496379

FUTURE ENTERTAINMENT SHOW '93

LONDON OLYMPIA 11TH - 14TH NOVEMBER

**COME TO THE ECU STAND (A251). CUT
OUT AND BRING THIS SECTION WITH
YOU AND WE'LL GIVE YOU AN EXTRA
POUND OFF EVERY GAME YOU BUY
DURING THE SHOW**

**AND IF YOU CAN'T MAKE IT DON'T WORRY - WE'LL GIVE
YOU THE SAME DISCOUNT OFF ANY PHONE ORDERS
PLACED BETWEEN THE SHOW DATES (11TH - 14TH
NOVEMBER) IF YOU QUOTE OUR STAND NUMBER WHEN
YOU CALL. CAN WE SAY FAIRER THAN THAT?**

ACES OVER EUROPE	28.99
+AIR COMMANDER	13.99
AIR COMBAT CLASSICS	CALL
ALIEN BREED	18.99
+B-17 FLYING FORTRESS	15.99
+BATTLE ISLE (ORIGINAL)	13.99
BATTLE ISLE '93	16.99
BATMAN RETURNS	19.99
+BAT 2	13.99
BLUE FORCE	25.99
BODY BLOWS	18.99
BRUTAL SPORTS FOOTBALL	19.99
CIVILIZATION	25.99
+CHESSMASTER 3000	15.99
CHUCK YEAGER'S AIR COMBAT	10.99
+COBRA MISSION (MEGATECH)	35.99
COMBAT CLASSICS 2	21.99
COMPLETE CHESS SYSTEM	22.99
+COMANCHE- MISSION DISK 2	14.99
CYBERRACE	29.99
+DAUGHTERS OF SERPENTS	10.99
DAY OF THE TENTACLE	26.99
DARKSON SHATTERED LANDS	CALL
+DAVID LEADBETTERS GOLF	15.99
DUNE 2	22.99
DRACULA	24.99
+EL FISH	15.99
EUROPEAN CHAMPIONS	19.99
+EVEN MORE INCREDIBLE MACHINE	25.99
F29 RETALIATOR	10.99
FALCON 3-MIG 29 MISSION	16.99
FIELDS OF GLORY	27.99
+FIRE AND ICE	CALL
FLASHBACK	24.49
FLIGHT SIM 5	29.99
FORMULA ONE G.P.	27.99
FOOTBALL PRO 93	25.99
GATEWAY 2	23.99
+GARY GRIGSBYS WAR IN RUSSIA	29.99
+GLOBAL EFFECT	10.99
GRAHAM GOOCH'S CRICKET	21.99
HISTORYLINE 1914-1918	24.99
INDY JONES FATE OF ATLANTIS	23.99
+INNOCENT	28.99
+JIMMY WHITES SNOOKER	17.99
JURASSIC PARK	22.99
LANDS OF LORE	22.99
LEMMINGS 2 - THE TRIBES	24.99
LINKS PRO 386	28.99
LINKS 386 COURSES	15.99
+LINKS THE CHALLENGE	12.99
LOST VIKINGS	21.99
MAGIC CANDLE 2	10.99
+MEGATRAVELLER	9.99

+MEGATRAVELLER 2	10.99
MIGHT & MAGIC 5 - XEN	29.99
MONKEY ISLAND	12.99
MONKEY ISLAND 2	24.50
NFL FOOTBALL	25.99
NHL HOCKEY	27.99
NODDY'S BIG ADVENTURE	19.99
PATRIOT	29.99
PINBALL DREAMS	21.99
PINBALL - TAKE A BREAK	25.99
PIRATES GOLD	27.99
+PREMIER MANAGER	15.99
PREMIER MANAGER 2	22.99
PRIVATEER	30.99
+PRIVATEER SPEECH PACK	14.99
PROTOSTAR	24.99
+POWER TACTICS COMPILATION	13.99
RAILROAD TYCOON DELUXE	27.99
+REX NEBULAR	15.99
RETURN TO ZORK	29.99
ROBOCOD	16.99
RYDER CUP	19.99
+ROME AD92	10.99
RULES OF ENGAGEMENT 2	28.99
SABRE TEAM	CALL
SEAL TEAM	27.99
SENSIBLE SOCCER	20.99
SHADOWCASTER	CALL
SIM CITY DELUXE	22.99
+SIMON THE SORCERER	25.99
SPACE HULK	27.99
SPACE LEGENDS	21.99

**SAVE EVEN MORE MONEY -
CALL US TODAY FOR
YOUR COMPLIMENTARY
COPY OF ISSUE 8 OF
EUROPEAN COMPUTER USER
AND FIND OUT ABOUT
FURTHER DISCOUNTS AND
SPECIAL OFFERS**



STRIKE COMMANDER	30.99
STRIKE COMMANDER SPEECH PACK	14.99
STRIKE COMMANDER SPECIAL OPS	14.99
STARLORD	27.99
STREETFIGHTER 2	19.99
STRONGHOLD	22.99
SPEEDRACER	25.99
SUPER LEAGUE MANAGER	19.99
SYNDICATE	26.99
TFX	29.99
THE BLUE AND THE GREY	25.99
THE PATRICIAN	23.99
TORNADO	27.99
UMS COMPILATION	29.99
ULTIMA UNDERWORLD II	24.99
ULTIMA VII SERPENT ISLE	27.99
ULTIMA VI	10.99
V FOR VICTORY 4	28.99
WARLORDS 2	27.99
WAYNE GRETSKY GOLD	CALL
WHEN 2 WORLDS WAR	25.99
WING COMMANDER	10.99
WING COMMANDER ACADEMY	23.99
WORLD CLASS RUGBY	10.99
X-WING	29.99
X-WING MISSION (IMP PURSUIT)	14.99
X-WING MISSION (B-WING)	14.99
XMAS LEMMINGS	13.99

CD ROM	
7TH GUEST	49.99
CHESSMASTER PRO (WIN)	39.99
DARKSEED	30.99
DAY OF THE TENTACLE	30.99
DINOSAUR ADVENTURE	39.99
DUNE	30.99
EYE OF THE BEHOLDER 3	25.99
INDY JONES FATE OF ATLANTIS	29.99
JUTLAND	37.99
KINGS QUEST VI	32.99
LAURA BOW 2	28.99
LEGEND OF KYRANDIA	28.99
LOOM	29.99
MAD DOG McCREE	35.99
MICROCOSM	31.99
RINGWORLD	26.99
SHERLOCK HOLMES 3	34.99
ULTIMA UNDERWORLD 1 & 2	34.99
WING COMMANDER & SPEECH	32.99
JOYSTICKS	
WARRIOR 5	10.99
THE MERLIN	14.99
FX 2000	19.99
MACH 3	28.99
CH FLIGHT STICK	31.99

All items are subject to availability. Prices can be subject to change. E & O E.
Post and packing: UK = 75p per item 2nd Class; £1.50 per item 1st Class; £2.00 per item 1st Class Recorded;
UK next (working) day Carrier £5.00. EEC post = £3.00 per item; non-EEC =
£6.00 per item; Swift Air EEC = £5.75 per item; SNon EEC = £9.00 per item.
Titles marked * may not be released at time of going to press.
Please telephone for availability and a full copy of our terms and conditions.
Titles marked + are available at quoted price while stocks last.



NAME
 ADDRESS
 POSTCODE PHONE
 ITEM PRICE
 ITEM PRICE
 ITEM PRICE
 (Please indicate if you require Disk or CD-ROM)
 Visa/Mastercard/Switch Number:
 POSTAGE TOTAL

Switch issue No: Card Expiry Date:

SIGNATURE:

Make cheques payable to:
European Computer User
& send to:
Units A2/A3 Edison Rd,
St Ives,
Huntingdon, CAMBS PE17 4LF

Putting the boot in

Take the strain out of setting up a PC for games. Gail Robinson explains how DOS 6 can make configuring your computer much more straightforward

Games software needs more hardware resources than ever before. In fact, you could find yourself turning your machine's configuration upside down just to get the darned things to run. Take the new Microsoft Flight Simulator 5, for instance. This incorporates no special video effects and quite basic sound effects, yet it's still resource-hungry and refuses even to install, let alone run, if you have less than 530K of conventional memory free, and expanded or extended memory available.

A PC optimised for game playing won't be optimised for running applications or Windows 3.1. OK, you could reconfigure your PC every time you want to switch from one to the other, but it's a pain. Luckily, there are ways round this thorny problem using some of the features found in MS-DOS 6.

The best place to start is with the MEM command so you can see how your memory is being used currently. Simply type in MEM at the DOS prompt and you should see a black and white table something like the diagram on the opposite page.

This is just a summary of memory use. To get more detailed information of what programs are in memory, type

MEM/C/P

Armed with this information, you could manually adjust your Config.sys and Autoexec.bat files, loading programs into upper memory. But there is a much better way to do this, because MemMaker can do these chores automatically. This utility scans your Config.sys and Autoexec.bat files, moving drivers and TSR (Terminate and Stay Resident) programs into upper memory. You can only do this if you have a 386SX or better.

There are a couple of ways to run MemMaker: express set-up goes away and optimises memory for you, or custom set-up gives you some control over the changes.

Custom set-up presents you with a set of questions on how you want the memory optimised. For example, it asks you

which drivers and TSR you want to tweak and if you want to scan the upper memory area aggressively.

MemMaker then optimises your memory use. It's foolproof too: if the utility does something your machine doesn't like, it offers to go back to your original memory set-up. In our test machine, it managed to reclaim an extra 27,328 bytes from conventional memory – not bad for two minutes work.

There's more tweaking you can do to squeeze extra RAM. For example, you could also load DOS high by editing the DOS=UMB command in your Config.sys file so that it reads:

DOS=HIGH,UMB

Other things to look out for include checking your Config.sys file to see if it has the stacks statement. By default, stacks will consume 2K of memory and you could reclaim that by adding:

STACKS=0,0

to your Config.sys.

Another Config.sys line you should pay attention to is buffers. If you're using Smartdrv, this statement is largely irrelevant and you can set it to 10 or less.

More than one way to skin a cat

Traditionally, gamers could use a clean system boot floppy to make sure that there's maximum memory free to run games. DOS 6 has a couple of more elegant solutions.

The first is dead easy to use. As your PC boots up, you'll see a message "Starting MS-DOS": you'll need fast reactions for this next bit. You've got two seconds or so to press F5 or F8. Why would you want to do this? F8 enables you to step through your Config.sys file and choose which lines you want to load. So you could choose not to load all those RAM-gobbling files in your Config.sys to leave the maximum free memory. The upgrade to DOS 6, version 6.2, offers you the chance to step through your Autoexec.bat file as well. By pressing the F5 key, you can bypass the Config.sys and Autoexec.bat files completely

Putting Config.sys to work

With DOS 6.0 it's possible to set up multiple configuration files for the PC. Here, we have two examples of what's needed in the Config.sys for a games set-up and for a more standard Windows configuration.

GAMES

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE NOEMS
DEVICEHIGH=C:\DOS\DBLSPACE.SYS /MOVE
DOS=UMB,HIGH
FILES=40
BUFFERS=10
```

WINDOWS

```
DEVICE=C:\DOS\SETVER.EXE
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE NOEMS
DOS=UMB,HIGH
FILES=40
BUFFERS=10
COUNTRY=044,C:\DOS\COUNTRY.SYS
SHELL=C:\DOS\COMMAND.COM C:\DOS\ /P
DEVICEHIGH=C:\DOS\DBLSPACE.SYS /MOVE
LASTDRIVE=Z
STACKS=9,256
```


PC memory

Trying to figure out your base, EMS and XMS memory? Type MEM to get a breakdown of your system memory something like this table.

Memory Type	Total	= Used	+ Free
Conventional	640K	43K	597K
Upper	87K	87K	0K
Adapter RAM/ROM	128K	128K	0K
Extended (XMS)	3241K	2217K	1024K
Total memory	4096K	2475K	1621K
Total Under 1 Mb	727K	130K	597K
Total Expanded (EMS)	1024K (1048576 bytes)		
Free Expanded (EMS)	1024K (1048576 bytes)		
Largest executable program size		579K (611168 bytes)	
Largest free upper memory block		0K (0 bytes)	
MS-DOS is resident in the high memory area.			

– the equivalent of booting from a clean system floppy.

A more complex solution, which might help those who don't have nifty fingers, is to set up multiple configuration files, by creating a Config.sys file that looks something like this:

[MENU]

This tells your PC you're about to create a menu of options.

MENUITEM=WINDOWS

MENUITEM=GAMES

These are the names of your two different configuration files: you can call them anything you want. I've called one Windows and it's going to load up all the files I need to run Windows and its applications. The other will be for games use and will load the bare minimum in to memory.

STACKS=9,256

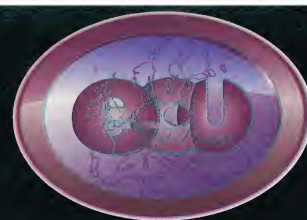
Above is the configuration information I need to load Windows stored under the [WINDOWS] menu option. All I've done is copy my original Config.sys, which I know runs Windows perfectly well and has already been optimised by MemMaker, and pasted in to our new mult-configuration Config.sys.

And this is the abbreviated games configuration file, which just takes the files I can't live without. Make sure you keep the file that loads any disk compression software – in my case it's MS-DOS 6's own DoubleSpace, Himem.sys the extended memory manager and EMM386 the expanded memory manager.

Save this file as Config.sys (renaming your old Config.sys file something sensible like Config.old so that you can go back to it if things go wrong). Reboot your machine and you'll see a menu pop up offering you two options – in my case option 1 is the Windows set up and option 2 is games. Just type in the appropriate number and your Config.sys file of choice is loaded.

The root of the problem

The first IBM PC used the Intel 8088 processor which can address 1Mb of memory, which in 1981 terms was a lot of RAM. It was never imagined that applications could ever want more memory than this. Of this 1Mb, IBM allocated 384K to adapter ROMs (like the video and hard disk controller), leaving a massive 640K for applications. Adapter ROMs are found on things like the video card and hard disk controller. No matter what PC you've got, these fundamental limitations apply.



europa
computer user

FREEPHONE
0800 318576

THE PRICE OF INFORMATION

0.00p PER MIN PEAK RATE

0.00p PER MIN STANDARD RATE

0.00p PER MIN ALL OTHER TIMES

- **LATEST TITLES**
- **DAILY SPECIAL OFFERS***
- **VERY LOW PRICES**
- **FAST SERVICE**
- **PROFESSIONAL SUPPORT**

**TO KNOW DOESN'T EVEN COST
THE PRICE OF A PHONE CALL**

***HM GOVERNMENT WARNING: THE PRICE OF
GAMES MAY GO DOWN AS WELL AS DOWN**

UNDER WATER • UNDER P

McKinley Mining Corp
C o n f i d e n t i a l



Name: James A. Witney
Call Sign: JAWS
Age: 26
Payroll Number: KP8843321XR
Rank: Captain Pilot (Class 2)

Special Skills:
Stealth/Covert Operations

Current Status: Active
Health: A1

Previous Contracts:
Antarctic Base HR - 67 days
South Atlantic QJ - 48 days

Current Contract:
North Sector 10 - Sea of Japan
Rate: \$ 5000 per day

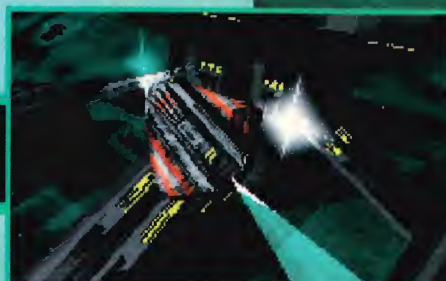
Operational Area:
124320 x 122877

Current Mission:
Lead the X3 team of unmarked
Tornado Class subs from
Carrier Dauntless on stealth
patrol and reconnaissance of
border territory between
McKinley 205 and GomPol 555.

SUB 20



THE UNDERWATER



RESSURE • UNDER ATTACK

WAR 50

It is the year 2050. In the search for vital mineral resources, undersea mining has become commonplace.

The companies who own these mines are powerful. There are regular conflicts between them and they use the latest underwater technology to defeat competitors. The most effective of these machines are the fighter submarines.

That's where you come in.

As the pilot of a fighter sub, you will be using 21st century sensor, navigation and weapon systems to defend company territory against attack. You will also be called on to carry out covert missions deep into enemy territory. The cost of failure is high. The financial rewards for success make it a risk worth taking.

SubWar 2050. Take the plunge and experience a unique simulation.

COMBAT SIMULATION

MICRO PROSE



THE Hanna-Barbera ANIMATION WORKSHOP

At last! An animation package that is fun and simple to use. Now everyone can make their own cartoons.

The Hanna-Barbera Animation Workshop brings the power of animation to your computer in a form that is user friendly. Using a simple yet powerful Icon Animation System (IAS), anyone can quickly produce impressive animations just like the professionals.

Complete with Hanna-Barbera animations (The Flintstones, Scooby Doo, Yogi Bear & The Jetsons), and clip-art for you to include in your own artwork.

Video input capability that allows you to import hand drawn animations and still backgrounds by using a camcorder or video camera and a digitizer.*

Contains features that the professional animator couldn't do without such as onion-skinning for careful positioning of frames and an adjustable exposure sheet so that you can get the timing just right!



© 1993 Hanna-Barbera Productions Inc.
Licensed by Copyright Promotions Ltd.

* Requires camera and Rombo digitizer (not included).

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA Tel: 081-343 9143
Empire Software is a registered trademark of Entertainment International (UK) Ltd.

empire
S O F T W A R E

Facts at your fingertips

CD encyclopaedias tried and tested

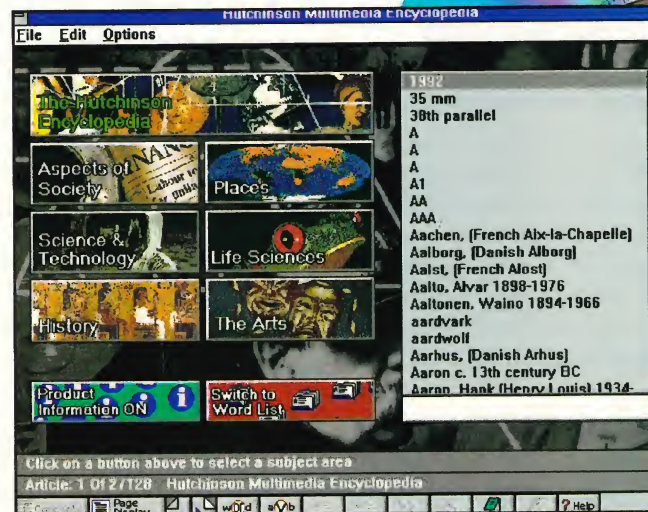
With a multimedia encyclopaedia, you can not only read the articles, but see related pictures and videos, and listen to speech and music. Christina Erskine tries out four contenders with the multimedia touch

Encyclopaedias, CD-ROM and multimedia could have been made for each other. The 600Mb storage capacity of a CD-ROM means that just about the only thing that will fill it up with ease is a gigantic database, and the computer is good at poring through hundreds of megabytes of data for repeating patterns, making textual searches quick and comprehensive. The multimedia aspect to the program neatly answers the question, "What's the point of putting it on disk when it made a perfectly acceptable book?" How much more interesting the book would be if instead of reading about Neil Armstrong's first steps on the moon, with a grainy picture, you could see the video of him emerging from Apollo 11, and hear his words in his own voice.

A clichéd way of explaining just how much information can be stored on a digital compact disc is to say that you could put the whole of the Encyclopaedia Britannica on just one of them. We may not have the Encyclopaedia Britannica here, but we do have four rivals for your money and thirst for knowledge.

The four programs we compared were The New Grolier Multimedia Encyclopaedia, the latest updated version, Hutchinson's Multimedia Encyclopaedia, Compton's Interactive Encyclopedia, and Microsoft's Encarta.

One advantage of the CD encyclopaedia over a book-based version is that rather than arranging material either strictly

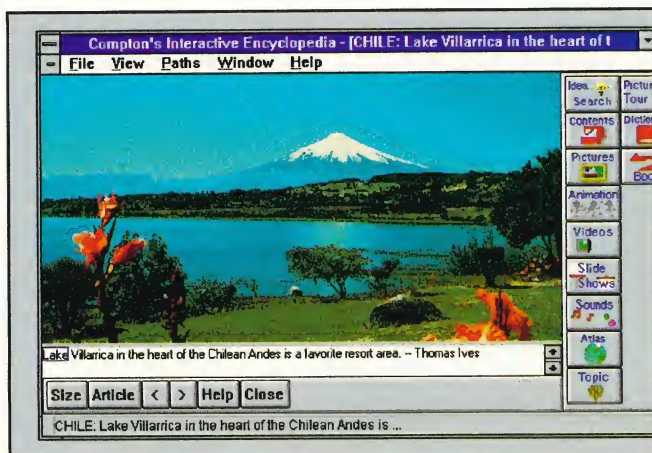


alphabetically, or topic by topic, the CD program can do both. In practice, 'browsing' through a list of 30,000-odd article headings is pretty tedious. It's simpler to find the item you require either by accessing its topic and then moving down the sub-categories, or by entering a salient word or phrase and finding the article from the ensuing word search.

Looking up the cross-references on a CD program is quicker than with a book as well. Rather than thumbing through hundreds of pages from one end of the alphabet to the other, all you need do on CD is click on the cross-referenced word and it will take only as long as the access time.

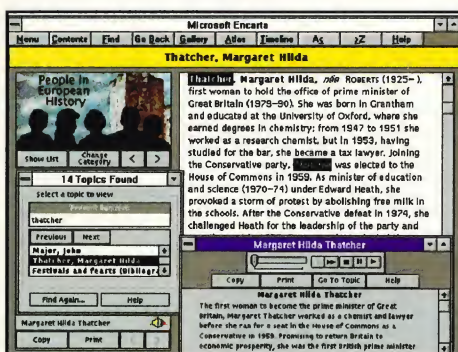
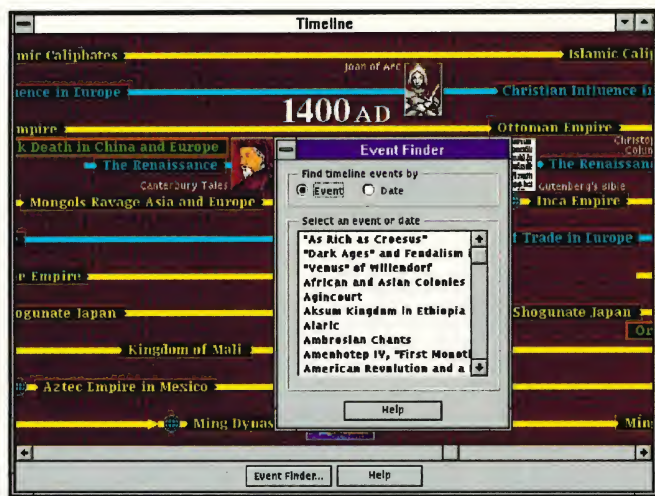
When testing the programs, we looked for two things above others: firstly, that style hadn't been sacrificed to content: that there was still plenty of information on as diverse a set of topics as you could reasonably wish for in an easy to access format, and, secondly, that there was indeed some style: that the multimedia aspect made the program more interesting and more enlightening than a book-bound equivalent.

Above: Hutchinson's Multimedia Encyclopedia's opening menu, showing the top level of the topic tree. Left: Lake Villarrica in central Chile, brought to you by Compton's Interactive Encyclopedia.



Right: Encarta's Timeline feature portrays various events in history in a linear chart. Click on the icons to bring up a list of related articles.

Below: Encarta is impressively rich in visual and audio accompaniments. This audio play screen pops up when you click on the audio play icon.



In order to do this, we selected a number of topics, some standard and some a little more obscure, to look up in each encyclopaedia, and compared the amount and diversity of information in each. Because Encarta, Compton's Interactive, and the New Grolier were all developed in the US, we also specifically looked up American Football and Association Football, and Ronald Reagan and Margaret Thatcher, to check how skewed these three programs were towards the mother country.

However, you can use the encyclopaedias for more than just browsing or looking up information. All the programs we looked at here include facilities to copy text to a file or on-screen 'notebook', for later editing and use in word processing programs, or to print out entries and pictures. The Encarta manual, in particular, goes into some detail about using the program to research and write reports.

Microsoft Encarta £235

Contact Microsoft (0734) 270001
Runs under Windows

Of the four products here, Encarta is undoubtedly the best presented. The screens remain clear and uncluttered even though the article screens contain not only the text but also a quarter screen picture of the subject – where one exists – and a graphic showing the current topic. While it's as easy as any other method to look up subjects using the general word search, the information can also be accessed under nine topic headings. The search is reasonably quick and in the subjects we looked up, the articles were rich in pictures and audio snatches. For example, under Popular Music, there are 15 musical extracts (some also appear under other headings: the bars of Argentine popular music are also played under Latin-American music, for instance) and three photographs (David Bowie, Michael Jackson and a picture of a guitar); under Chile, the country, nine pictures showing the landscape, people and architecture.

Moving around Encarta is intuitive and flexible, ie, there are a number of ways of accessing the same information, and everything works by clicking the related labelled button, or clicking highlighted text.

One particularly interesting feature is the language section of the Gallery, where 46 world languages can be called up and

you can hear simple words like 'yes', 'no' the typical greeting and a proverb spoken in the language by choosing each phrase from a pictorial map. However, I have some reservations here: English and American English are differentiated, but the former speaker has a distinctly mid-Atlantic twang, and one of his phrases is, "My name is Csanad", which is not, to my knowledge, an English name borne by anyone. This is a US-developed product and it shows: plenty on American football, no mention of any European soccer clubs, although Pele gets his biography in (he played for New York Cosmos for a while, you see) and there is a spectacular picture of the Olympic football stadium in Munich – captioned, "a soccer field". Enough said.

Still, it's a highly polished program, extensively cross-referenced, and the sheer number of audio/visual extras lifts reading screeds of screen text into a fascinating process.

Compton's Interactive Encyclopaedia

Compton's NewMedia, £354.49

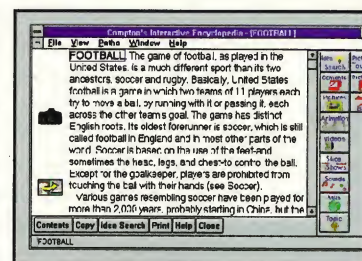
Contact Active Distribution (081) 838 1280
Runs under Windows

Similar to Encarta in the breadth of subjects covered – the top level of the topic tree alone divides entries according to 19 subjects – and companion features (like Encarta, it has an atlas and a 'timeline': events in history shown in linear chart form), Compton's also has a dictionary, 120 video clips (in a minuscule screen window) and animations, as well as speech, 'sounds', such as a cat purring, or volcano erupting, and still pictures to accompany the text. As an all-rounder then, it scores highly.

Also like Encarta, Compton's is unashamedly American in origin. Reagan gets a picture, Thatcher doesn't; American footballers are lovingly illustrated, Pele is the only soccer player deemed to be worth a mention.

It's a shame that the videos are so small on the screen, because some of them are rather lovely to look at, but the pictures, on the whole, are of variable quality. A beautiful shot of Lake Villarrica in the Andes accompanies Chile (see page 51), but the picture of Crater Lake in Oregon – a not dissimilar type of shot – is a dreadful blur. On another subject, the Live Aid picture under Popular Music is unrecognisable.

Compton's dealt with PC Review's selected topics (see panel overleaf) competently. It differentiated between French, Italian and English truffles (so we learned something new there, at least!); its Gothic novel entry was exhaustive



Right: In Compton's Interactive Encyclopedia, the camera icon shows that a related picture can be called up; the icon below it indicates that a related entry can be cross-referenced.

Below right: Compton's also has plenty of video clips, which, although rather small, are mostly appealing.

FANTASTIC FOOTBALL ACTION!

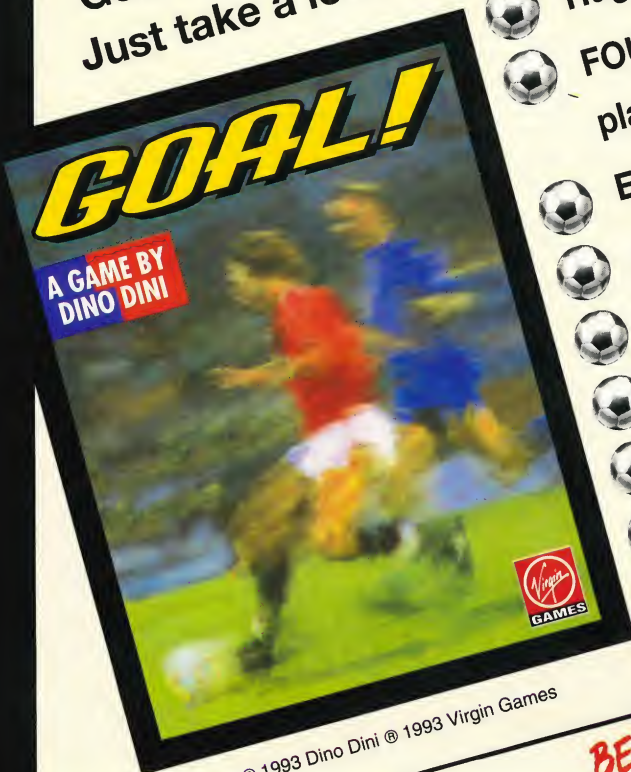
GOAL!

When it comes to creating action-packed, super playable football games, no one can beat Dino Dini, the mastermind behind Kick Off and Kick Off 2, except Dino Dini himself, that is...



Now Dino has surpassed all his previous efforts. Goal! his latest excursion onto the pitch, offers greater depth than any other footie game you've seen. What's more, it's got a host of features that make getting to grips with the gameplay a delight and mastering it the ultimate challenge. Goal! has all you'll ever need - or want - in a footie action game. Just take a look at a few of the unique features:

- Huge selection of fully editable teams, real player names and kits
- FOUR pitch views - Wembley, Normal, Wet and Muddy - all playable in full and half scale, horizontal and vertical
- Enhanced graphics with better view of the action
- Atmospheric spot sound effects - listen to that crowd roar!
- Superb refined gameplay and computer controlled players
- Every player has 8 carefully selected attributes
- Rewind, Fast Forward, Slow-Mo savable action replays
- Precise control of corners, throw-ins and free-kicks
- Editable cup and league systems
- Arcade challenge mode



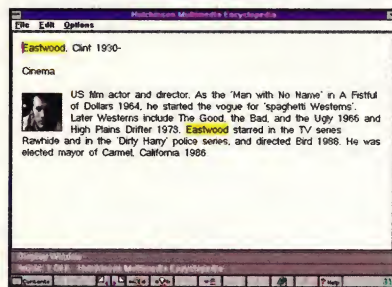
© 1993 Dino Dini © 1993 Virgin Games

BE SENSIBLE. BUY THE BEST FOOTIE GAME THERE IS!
Available on IBM PC and compatibles



Right: Hutchinson's Multimedia Encyclopedia at least treats our national game rather seriously.

Below: Brief and to the point, this is all Hutchinson's can find to say about Clint Eastwood.



– and surprising, since it managed to include Oscar Wilde, Thomas Hardy and Charles Dickens as all strongly influenced by the genre. On classic cars, absolutely *everyone* who ever produced a fast motor is listed, which meant that Compton's was the only program to mention Maserati. It was refreshingly plain-speaking about the arrival of punk under Popular Music, dismissing it as "very loud 70s music".

I liked Compton's Interactive Encyclopaedia. It's very easy to browse through quickly, with intuitive menu buttons on the right of the screen, and it has at least as broad a reach as Encarta, and even more in the way of animation and video, although with some items the quality isn't as high or as polished. Also, the detail of entries seems inconsistent: some subjects you thought might be obscure get more treatment than more obvious topics.

Hutchinson Multimedia Encyclopedia PEP Associates, £149.99 Contact FOS-CD, (0296) 682233 Runs under Windows

By now, the control interface for CD-ROM encyclopaedias is looking like a standard. You have an index of entries, which no-one in their right mind would go through to find an individual item, since they're around 30,000 entries long. Rather, you use the word search or move down the topics tree until you've isolated the exact subject you want.

Hutchinson's topic tree starts at the top level with six subjects: aspects of society, science and technology, history, places, life sciences and the arts. However, one aspect of the topic layout had me confused for a while. At one point I was pole-axed to find a word search on 'Thatcher' yielded only two matches – and this is the British-originated program – until I realised I

was hunting within 'the arts', which explained just about everything. Later on, I found Geoffrey Howe delivering his cricketing analogy in his resignation speech to the House of Commons in one of the audio clips, but seemingly no cross-reference to the woman who had taken the stumps away. This turned out to be because Howe is filed under History, and Thatcher under Aspects of Society. I suppose it doesn't really matter, but it did cause the odd glitch when browsing through the program.

The menu bar is less intuitive than either Encarta's or Compton's. It does not have a timeline chart, nor an atlas – although maps are provided with most countries with a caption bar set across the screen and obliterating part of the image.

In general, Hutchinson's covers much the same ground as the others but the detail is sparser, although we managed to access all our selected topics, but found the material in most was briefer. Still, it did list the signs of the zodiac (Grolier, surprisingly, didn't), and it was the only one of the four to give a name-check to the intrepid Victorian explorer, Isabella Bird.

Developed by PEP Associates in Cambridge, Hutchinson's scored well on the Anglo-American balance, not surprisingly. British, and indeed, European politics gets much more space than American political activity, and when you find yourself scrolling through a list of Scottish FA Cup winners from 1977 onwards, you know the program's been developed in the UK.

Hutchinson's multimedia aspects include still pictures and audio clips: musical snatches and speech. No video or animations. As with the textual material, the feeling persists that there are slightly fewer of the visual/audio extras than in the other three programs.

New Grolier Multimedia Encyclopedia Software Toolworks, £293.95 Contact (0444) 246333 Runs under DOS

As the only DOS-based program in this collection, the Grolier's text-based articles look dull compared to the others, which is a shame, because there is a vast amount packed in here.

Grolier scored best in the selection of people we chose to look up as guinea pigs for the review. In fact, it's strong all-round on biographies of people; we found more individuals being cross-referenced with their own separate entries as we trawled through the



Right: Although Grolier's text-based screens are a trifle dull, it does have the clearest maps of the four programs ...

... and some of the full-screen stills, such as the Lloyds of London building, here, are rather attractive as well.

Tested topics

The subjects (right) were specifically looked up and followed through on each of the encyclopaedias. They were chosen more or less at random, but also attempted to embrace a range of subjects (history, geography, science, etc) and we also chose topics about which at least one person at PC Review knew something about, so that we would have some idea as to whether the information in the program was up to the mark. The subjects were: classic cars; horoscopes and astrology; pop music, particularly of the 70s; Chile; Victorian travellers and exploration; the Gothic novel; science fiction; and truffles (I can't remember who came up with 'truffles', and I certainly can't remember why).

other selected topics than were included in the other programs. For an American program, it also did well in our US vs Rest of the World test. While Ronald Reagan is mentioned in 159 entries to Margaret Thatcher's 16 (and has a much more flattering picture), it does at least take our national game seriously. Six European footballers have their own biographies and there is a complete table of World Cup winners. Incidentally, Grolier was the only one of the encyclopaedias to point out that Pele is not only the name of "the greatest of all footballers", but also of a Polynesian goddess.

The program also contains still pictures, video clips, maps and sound. The maps are very good in comparison to the other programs with more details. The accompanying country outlines and fact boxes list information in more tabular form than the commentaries of the other programs, which makes it perhaps easier to spot the required information, but less accessible to read. The videos, pictures and audio are, like Compton's, rather variable: very good when good, unrecognisable in some instances.

I reckon Grolier probably holds more sheer information than the others – those DOS text files should be smaller, after all – which may make it better for those who want a serious reference tool rather than an interesting browse. But the limitations of its presentation make it comparatively heavy-going: you'd be more likely to use it because you need to, not because you want to.

What's in a name?

We asked each program to find references to a number of famous or significant people, some more so than others, from a range of walks of life and periods in history, in an attempt to see how comprehensive the encyclopaedias were.

Key

- ♥ = mentioned under another heading
- ♣ = given their own separate biography
- ♦ = biography contains a picture as well

	Compton's	Encarta	Grolier
Hutchinson's			
Genghis Khan (ca1167-1227) Mongol warlord whose hordes conquered much of Asia	♥ ♣	♥ ♣ ♦	♥ ♣
Vasco da Gama (ca1460-1524) Portuguese explorer, the first to sail around Africa	♥ ♣	♥ ♣ ♦	♥ ♣ ♦
Rosalind Franklin (1920-1958) Member of the team which went on to discover DNA (and who scandalously didn't win the Nobel Prize)	♥ ♣	♥ ♣	♥ ♣ ♦
Mark Clark (1896-1984) US general who came to prominence in the Korean War	♥	♥ ♣	♥ ♣
Toni Morrison Nobel Prize for Literature winner in 1993, not to be confused with ...	♥	♥ ♣	♥ ♣ ♦
Van Morrison Irish singer-songwriter	×	×	♥ ♣ ♦
Pele Brazilian footballer, the best in the world	♥ ♣	♥ ♣ ♦	♥ ♣ ♦

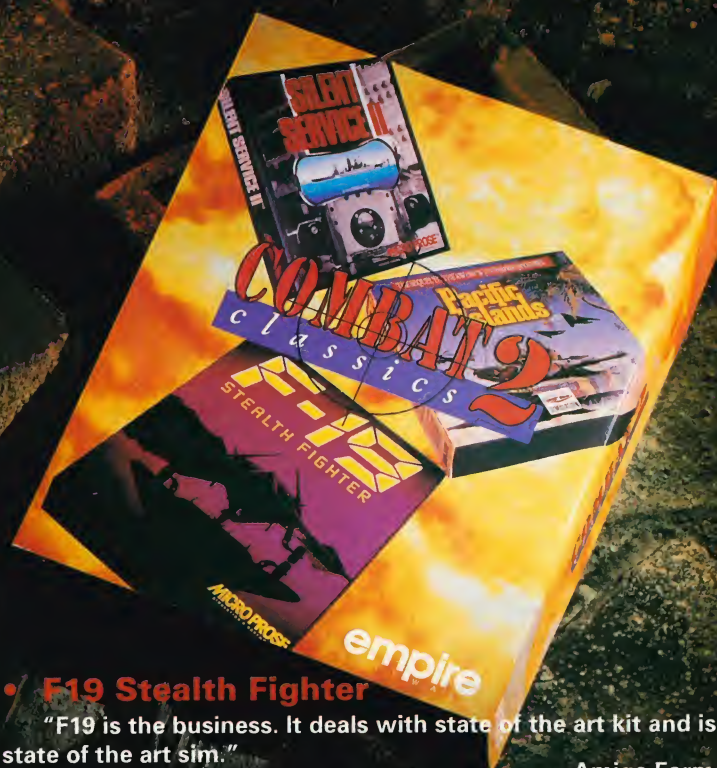
* Hutchinson's 'biographies' can be very short indeed: Rosalind Franklin gets all of two lines, Toni Morrison three, while Van Morrison and M C Escher tie on four lines each.

COMBAT 2 classics

ANOTHER WINNING COMBINATION

THREE WORLD CLASS SIMULATION
PRODUCTS NOW AVAILABLE IN ONE
SUPERB VALUE COMPILATION

Available from October
Amiga - £29.99 and IBM PC - £34.99



• F19 Stealth Fighter

"F19 is the business. It deals with state of the art kit and is a state of the art sim."

Amiga Format

"F19 Stealth Fighter is an excellent flight simulation."

PC Format

© Microprose Software, Inc. ALL RIGHTS RESERVED

• Pacific Islands

"Frighteningly realistic: Pacific Islands is like juggling with smouldering dynamite. Lose your cool once, and you're dead."

Amiga Format

"Pacific Islands is immensely rewarding. It's likely to keep wargamers and mere amateurs hooked to their final battle."

PC Review

© Empire Software, Oxford Digital Enterprises
ALL RIGHTS RESERVED

• Silent Service II

"An engrossing tactical experience. If only all sequels were this good."

PC Review

"The spirit of Silent Service remains unchanged, it is still hit and run, kill or be killed...superb."

Amiga Format

© Microprose Software, Inc. ALL RIGHTS RESERVED

MICROPROSE

empire

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA.
Telephone: 081-343 9143

Empire Software is a registered trademark of Entertainment International (UK) Ltd.

Power



Mark

**Technical
Sales
Order Lines
081-
951 3355**

ADVENTURE CD ROMS

NEW! LABYRINTH OF TIME	£25
NEW! JUTLAND	£39
NEW! DARK SUN	
NEW! SHATTERED LAND	£29
NEW! GOBLINS III	£32
NEW! LOST IN TIME	£35
NEW! REBEL ASSAULT (STAR WARS)	£31
NEW! GATEWAY II	£23
NEW! ALONE IN THE DARK	£29
NEW! SHADOW OF THE COMET	£29
NEW! CYBERSPACE	£31
NEW! MARIO IS MISSING	£29
NEW! LANDS OF LORE	£29
NEW! MAD DOG MACREE	£28

**100s of CDs
available,
including Art,
DTP, Image,
Geography,
Language and
many other topics**

MEDIA MOMENTS

Famous media moments...

You cannot be serious
John McEnroe
Any demonstration
that goes
wrong
**Tomorrow's
World**
Russell Harty
being attacked
Grace Jones



The Media Bank

at Powermark

NATURE CD ROMS

MICROSOFT DINOSAURS	£35
DICTIONARY OF THE LIVING WORLD	£42
• Database of life on earth	
• 3000 text entries & 1000 pictures	
BRITISH BIRDS	£108
TROPICAL RAIN FOREST	£27
CREEPY CRAWLIES	£42
• The biology of beetles and spiders	
EXPLORING EARTH SCIENCES	£165
EXPLORING PLANT SCIENCES	£165
DEEP VOYAGE	£79

**CALL
081-951 3355 IF
THE CD ROM YOU
REQUIRE IS NOT
LISTED HERE**

MUSIC & CINEMA CD ROMS

ROGER EBERT'S MOVIE COMPANION	£28
MICROSOFT CINEMANIA	£31
• 19,000 capsule reviews	
• 3000 biographies and photographs	
• 754 detailed reviews and movie stills	
JAZZ	£49
MICROSOFT MUSICAL INSTRUMENTS	£32
GROOVES	£77
• 100 clips of high quality musical accompaniment	
MICROSOFT MOZART	£35
MICROSOFT STRAVINSKY	£35
MICROSOFT BEETHOVEN	£35
• An in-depth analysis of each movement of the Ninth Symphony	
• Musical knowledge quiz	
INTRODUCTION TO CLASSICAL MUSIC	£79
COMPOSER QUEST	£49
MPC WIZARD	£10
SOUNDWORKS	£25

Available only on floppy disk

MICROSOFT SOUNDBITS:	
HANNAH BARBERA	£23
MGM	£23

BARGAIN BASEMENT

CHERRY KEYBOARD	£27
MOUSE - MS compatible, with Mousemat	£8
SOUNDBLASTER V.2 DELUXE	£44
TRIGENT 1MB SVGA CARD	£49
SUPERSTOR	£14
PANASONIC 562 - CD ROM bare drive	£159

NEW CD ROM TITLES

A selection of this months latest releases

OCEANS BELOW	£25
SPACE IN MOTION	£25
SPACE (PSYGNOSIS)	£26
GROLLIER V.6	£158
MICROSOFT GOLF	£36
ADVANTAGE TENNIS	£26
MURMURS OF EARTH	£29
KARAOKE MID-SUMMER NIGHTS DREAM	£57
CREATION STORIES	£34
ALPHABET BLOCKS	£29
FUNNY: THE MOVIE IN QUICKTIME	£34
CAPITOL HILL	£27
DARK SEED	£31
RETURN TO ZORK	£34
TORNADO	£34
UFO	£37
ANIMAL ALPHABET	£34
LORD OF THE RINGS 20TH CENTURY (5 DISK SET)	£112
RYDER CUP	£26
LOVERS GUIDE (18)	£28
HUMANS 1 & 2	£28

JURASSIC PARK	£24
DRACULA UNLEASHED	£34
PROTOSTAR	£27
MICROCOSM	£34
T.F.X	£34
INCA 2	£37
STAR TREK 2	£27
LEISURE SUIT LARRY 4	£29
DIGITAL LOVE	£19
STAR WORKS CHESS FOR WINDOWS	£39
MINDSCAPE CD SAMPLER	£6
WALKTHROUGHS & FLYBYS	£26
THE PICTURE LIBRARY	£28
CREATION STORIES	£34
• Scientific theories and legends of the Earth's Creation	
INTERACTIVE SPACE ENCYCLOPAEDIA	£69
• All new Windows version with 100 video clips	

NEW!

SPACE CD ROMS

SPACE SCIENCE SET 1	£22
SET 2	£79
• Photographs from the NASA space programme	
SPACE SHUTTLE	£37
• Become a member of the crew and experience living and working in space	
SPACE SERIES: APOLLO	£26
WORLD VIEW	£22
INTERACTIVE SPACE ENCYCLOPAEDIA	£74
SPACE ADVENTURE	£49

ENCYCLOPAEDIA & DICTIONARY CD ROMS

CIA WORLD FACT BOOK	£19
• A yearly world almanac	
KGB WORLD FACT BOOK	£19
• Produced in Russia, includes facts and figures for 253 countries and territories world-wide	
GROLLIER ELECTRONIC ENCYCLOPAEDIA	£195
GUINNESS DISC OF RECORDS 1993	£49
HUTCHINSONS MULTIMEDIA ENCYCLOPAEDIA	£95
• The first British multimedia encyclopaedia	
INVENTIONS AND INVENTORS	£Call
MACMILLAN'S DICTIONARY FOR CHILDREN	£33
MICROSOFT ENCARTA	£195
• 28 volume encyclopaedia	
Special Education Price	£139 (proof of status required)

ENTERTAINMENT CD ROMS

KINGS QUEST VI LANDS OF LAW	£31
• A full interactive fantasy role play	
NEW! CONSPIRACY	£37
• Act the role of a KGB agent	
NEW! POLICE QUEST IV	£32
• All new police adventure game	
ANECDOTE 3	£9
7TH GUEST	£43
STELLAR 7	£25
LOOM	£38
BATTLE CHESS	£25
CHESSMASTER 3000	£27
WING COMMANDER 2	£31
NEW! LEGEND OF KYRANDIA	£34
• A fantasy adventure in an enchanted forest inhabited with dragons	
NEW! DUNE	£35
• An all new fantasy space adventure game based on the best selling Frank Herbert Novel	
SHERLOCK HOLMES CONSULTING DETECTIVE: VOLUME 1	£19
VOLUME 2	£29
VOLUME 3	£33
• Full-motion colour video whodunits	
JONES IN THE FAST LANE	£29
CONAN THE CIMMERIAN	£28
SOFTWARE JUKEBOX	£34
VIRGIN CD BUNDLE	£119
• Includes 7th Guest, Dune, Legend of Kyrandia and Space Shuttle	

**MULTIMEDIA EXPERTS
AVAILABLE FOR
SPECIALIST ADVICE**

CD ROM ACCESSORIES

Quality Disk Caddy	£5
10 Pack	£45
CD ROM Drive Laser Cleaner	£24
CD ROM Disk Cleaner Kit	£19
Refills for above	£6
CD Tower Storage Unit	£24

BUNDLES

CD ROMs available at these very special low prices only when you buy a CD ROM drive or multimedia kit	
7th Guest	£25
Legend of Kyrandia	£23
Capitol Hill	£19
Oceans Below	£19
Timetable of History: Innovation	£23
Entertainment	£23
Politics & Media	£23
Space Shuttle	£19
Interactive Storytime Vol.1	£14
Mavis Teaches Typing	£21
Chessmaster 3000 Pro	£19

SONY CD ROM DRIVES

SONY EXEQ	£328
• Includes Sony multi-session drive, 16 bit ProSpectrum sound card, active speakers, microphone, Photo CD software & bundled software	
CDU31A	£139
• Multisession internal drive	
• Tray loading	
• Head phone socket with volume control	
• 400ms access time	

TOSHIBA CD ROM DRIVES

3401 INTERNAL	£289
3401 EXTERNAL	£389
• 200ms access time	
• Dual speed	
• Multisession and Photo CD compatible	
• Requires SCSI host adapter	
Audio leads	£5
Photo CD Software	£29
4101 INTERNAL	£199
4101 EXTERNAL	£279
• 385ms access time	
• Dual speed	
• Multisession	
• Requires SCSI host adapter	

**ALL OUR MULTIMEDIA
PRODUCTS ARE 100%
COMPATIBLE AND COME
WITH A MINIMUM 12
MONTH GUARANTEE**

SCSI CONTROLLERS

STANDARD AT KIT - INTERNAL	£49
EXTERNAL	£59
ADVANCED AT 16BIT KIT - INTERNAL	£119
EXTERNAL	£129
MCA KIT - INTERNAL	£109
- EXTERNAL	£119
PARALLEL TO SCSI KIT	£74
EZ-SCSI V.2 SOFTWARE	£58

CALL 081-951 3355 IF THE UPGRADE YOU REQUIRE IS NOT LISTED HERE

The Media Bank at Powermark

CREATIVE LABS FEATURE

SOUNDBLASTER CARDS

SOUNDBLASTER V.2 DELUXE £44

- Text-to-speech synthesiser
- 11 voice FM music
- Digitised voice input/output
- DMA and hardware decompression
- Full duplex MIDI interface
- Joystick port
- Microphone and line-in jacks
- Power amplifier (4 watts per channel) and volume control
- 64K buffer
- 6 melodic sounds plus 5 percussion or 9 melodic sounds
- Includes Indy 500 and Lemmings

SOUNDBLASTER PACK £82

Includes SoundBlaster V.2 Deluxe, amplified speakers, joystick and bundled software.



ALL OUR PRODUCTS ARE 100% COMPATIBLE AND COME WITH A MINIMUM 12 MONTH GUARANTEE



MIDIBLASTER

SOUNDBLASTER

- MCA PRO POWERCUT! £145**
- 20 voice enhanced 4-operator stereo FM synthesiser
 - Stereo recording for line-in CD-audio
 - Digital and analogue mixer
 - Joystick port
 - Bundled software

WAVEBLASTER £139

- Add-on daughterboard for SoundBlaster 16
- Sound Read Only Memory
- 213 DC quality musical instrument sounds
- Presets include 128 instruments, 18 drum kits, 50 sound effects

SOUNDBLASTER PRO £79

- 20 voice enhanced 4-operator FM synthesiser
- Stereo recording for line-in and CD-audio
- Digital and analogue mixer
- Joystick port
- Full software control of fade-in, fade-out, pan, volume, left/right steering and microphone mixing
- Includes Indy 500, Lemmings, MPC Encyclopaedia in CD ROM

SOUNDBLASTER PRO PACK POWERCUT! £136

Pack includes SoundBlaster Pro card, dynamic microphone, amplified speakers, joystick, 1 in/1 out MIDI interface, MIDIsoft Recording Session software and bundled CD ROM software.

SOUNDBLASTER 16 £1114

- 16-bit stereo sampling and playback
- 20-voice enhanced 4-operator stereo FM-synthesiser
- Stereo DAC with hardware ADPCM
- CD ROM interface
- Stereo recording for line-in and CD-audio
- Full duplex MIDI interface
- Expansion for PCM wave table synthesiser
- Digital and analogue mixer
- Joystick port

SOUNDBLASTER 16 ASP £165

- 8-bit or 16-bit stereo sampling and playback
- 16-bit real time compression/decompression in hardware
- 20 voice enhanced 4 operator stereo synthesiser
- Joystick port
- Bundled software included



SOUNDBLASTER 16 ASP

SOUNDBLASTER

- 16 ASP SCSI £195**
- Supports SCSI I & II
 - Includes EZ-SCSI software

SOUNDBLASTER 16 ASP

- MULTICD £172**
- Supports Panasonic, Mitsumi and Sony CD ROM drives

MIDIBLASTER £179

- For amateur and professional music composition and presentation
- 20 polyphonic sounds and drums
- 16 channels, 128 preset sounds, 33 preset effects, 55 preset drums
- Bundled software

MULTIMEDIA KITS

EXPLORER PACK £355

- Sony CDU31A internal CD ROM drive
- SoundBlaster Pro
- Amplified speakers
- Dynamic microphone
- Bundled software includes Kodak Photo CD, MPC Battle Chess, MPC Demo Disk, Multimedia Music Explorer and STW Multimedia Encyclopaedia

DISCOVERY PACK

INTERNAL £445

- Panasonic CR563 multispin/twinspeed internal CD ROM drive
- SoundBlaster Pro 16
- Pro Digital speakers
- Microphone
- Bundled software includes Kodak Photo CD, Multimedia Music Explorer, STW Multimedia Encyclopaedia, Animals, Loom, Secret Weapons of the Luftwaffe and Monkey Island

DISCOVERY PACK

- EXTERNAL £485**
- As above but with external drive

PROFESSIONAL PACK

INTERNAL £445

- Panasonic CR563 multispin/twinspeed CD ROM drive
- SoundBlaster Pro 16
- Pro Digital speakers
- Microphone
- Bundled software includes Kodak Photo CD, Multimedia Music Explorer, STW Multimedia Encyclopaedia, Macromind Action, Authorware Star, and Tempura

PROFESSIONAL PACK

- EXTERNAL £485**
- As above but with external drive

SOUNDBLASTER CD 16 £445

- Includes SoundBlaster Pro 16, Double Speed multisession internal CD ROM drive, amplified speakers and top selling CD titles

MULTIMEDIA EXPERTS AVAILABLE FOR SPECIALIST ADVICE

Power



Mark

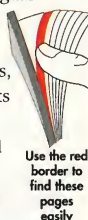
Technical Sales Order Lines
081-951 3355

VIDEO CARDS

CREATIVE LABS

VIDEOBLASTER PLUS £254

- Displays full-motion, digital video in a moveable, sizeable window
- Captures, freezes, stores, manipulates and exports images from VCRs, Videodisc, cameras and broadcast video
- Overlays computer text and graphics on video



VIDEOBLASTER PLUS

VIDEOSPIGOT £229

- Video capture card giving full motion video in real time at up to 30 frames per second
- Includes Microsoft Video for Windows

TURN THE PAGE FOR MORE MULTIMEDIA

TV CODER £219

- Use your TV as a monitor
- Flicker-free display
- Converts SVGA to composite video and SVHS
- Videoblaster interface
- TV Panel software included



CALL 081-951 3355 IF THE UPGRADE YOU REQUIRE IS NOT LISTED HERE

MEMORABLE ADS

Famous ad campaigns
...Joan Collins and Leonard Rossiter

Cinzano
... "Is she or isn't she?"

Harmony
Hairspray

... "Are you with us?"

Woolwich
Building Society



Power



Mark

**Technical
Sales
Order Lines
081-
951 3355**

INTEL MATHS CO-PROCESSOR VALUE PACKS

Take advantage of our special value 'bundle' packs. Purchase any INTEL 387 Maths Co-Processor and get a top selling Microprose game at a bargain price. There's Paths Of Glory, Return Of The Phantom and Formula One Grand Prix to choose from.

The Media Bank

at Powermark

INTEL FEATURE



INTEL MATHS CO-PROCESSOR VALUE PACKS

INTEL 80387SX 16MHZ - 33MHZ WITH PATHS OF GLORY	£67
INTEL 80387SX 16MHZ - 33MHZ WITH RETURN OF THE PHANTOM	£67
INTEL 80387SX 16MHZ - 33MHZ WITH FORMULA ONE GRAND PRIX	£67
INTEL 80387DX 16MHZ - 33MHZ WITH PATHS OF GLORY	£67
INTEL 80387DX 16MHZ - 33MHZ WITH RETURN OF THE PHANTOM	£67
INTEL 80387DX 16MHZ - 33MHZ WITH FORMULA ONE GRAND PRIX	£67

Intel Maths Co-Processors make over 2100 software programs run faster. The Maths Co-Processor offloads complicated maths functions from your computer's main processor. It handles in one instruction what would have required many steps by the standard processor. So now you can save time on your spreadsheet, database and graphics packages. Depending on your application, your software can run up to 5 times faster.

**ALL OUR PRODUCTS
ARE 100%
COMPATIBLE AND
COME WITH A
MINIMUM 12 MONTH
GUARANTEE**



INTEL SMART VIDEO RECORDER

The full length ISA board captures and compresses video from VCR's, camcorders, video discs and other sources.

- Records up to 30 frames per second (fps) in a 160X120 window, up to 15 fps in a 320X240 window
- Automatically defines and optimizes the colour palette
- Plays back on 486SX 25MHz PC or higher with Windows 3.1
- Bundled software

INTEL SMART VIDEO £385



INTEL SMART VIDEO
RECORDER



INTEL OVERDRIVE

INTEL OVERDRIVE

- Upgrades 486SX and DX systems to DX2 performance
- Easy to install single chip upgrade
- Lifetime warranty
- Improves system performance up to 70%
- Compatible with over 50,000 applications including all DOS, Windows, OS/2 and UNIX applications

INTEL 486 20MHz - SX40MHz DX	£275.00
INTEL 486 25MHz - SX50MHz DX	£349.00
INTEL 486 25MHz DX - 50MHz DX	£349.00
INTEL 486 33MHz DX - 66MHz DX	£455.00

NEC FEATURE

**TURN THE PAGE
FOR MORE
MULTIMEDIA**

NEC CD ROM DRIVES

NEC 84

- MPC, multisession XA internal drive
- 300K/sec data transfer rate at 600rpm
- 280ms access time
- 256K buffer
- 50,000 hours MTBF
- SCSI I and II 16-bit switchable interface
- Automatic lens cleaning system
- Headphone socket with volume control included
- ISO 9660 compatible

NEC 84	£295
NEC 84 WITH ISA KIT	£344
NEC 84 WITH ADVANCED ISA KIT	£414
PHOTO CD SOFTWARE	£19

**MULTIMEDIA
EXPERTS
AVAILABLE
FOR SPECIALIST
ADVICE**



NEC 74

NEC CD ROM DRIVES

NEC 38 PORTABLE

- MPC, multisession XA compatible portable drive
- 300K/sec data transfer rate at 600rpm
- 400ms access time
- 20,000 hours MTBF
- Weighs 2.2lbs without batteries

NEC 38	£254
NEC 38 WITH ISA KIT	£299
NEC 38 WITH ADVANCED ISA KIT	£378
NEC 38 WITH PARALLEL TO SCSI KIT	£326
BATTERY PACK	£69
PHOTO CD SOFTWARE	£19

**CALL
081-951 3355
IF THE
UPGRADE YOU
REQUIRE IS NOT
LISTED HERE**



NEC 38 PORTABLE

NEC

NEC CD ROM DRIVES

NEC 74

- MPC, multisession XA external drive
- 300K/sec data transfer rate at 600rpm
- 280ms access time
- 32K buffer
- 25,000 hours MTBF
- SCSI I and II 16-bit switchable interface
- Automatic lens cleaning system
- Headphone socket with volume control included
- ISO 9660 compatible
- Built in RCA jacks

NEC 74	£379
NEC 74 WITH ISA KIT	£428
NEC 74 WITH ADVANCED ISA KIT	£517
NEC 74 WITH PARALLEL TO SCSI KIT	£469
NEC 74 WITH MCA KIT	£499
NEC 74 WITH EISA KIT	£469
PHOTO CD SOFTWARE	£19

NEC MONITORS

NEC MULTISYNC 3FG £357

- 15" CRT
- Unlimited colours
- 1024 x 768 resolution
- Complies with all EEC health and safety regulations
- 0.28mm dot pitch
- Horizontal synchronisation 31.5KHz to 38KHz
- Vertical synchronisation 55Hz to 90Hz



NEC MULTISYNC 3FG

NEC MULTISYNC 3FGe £467

- 15" CRT
- Unlimited colours
- 1024 x 768 resolution
- 0.28mm dot pitch
- Horizontal synchronisation 47.5KHz to 49.5KHz
- Vertical synchronisation 55Hz to 90Hz

CALL 081-951 3355 IF THE UPGRADE YOU REQUIRE IS NOT LISTED HERE

Inside

The CD-ROM drive

Compact discs are now familiar to everyone, but the technology behind the drives and shiny discs is far from simple. Mike James reflects ...

The CD-ROM drive is beautifully simple in theory, but when you actually discover what it takes to make it work it's even more amazing. The basic idea works on the principle that a laser beam is shone on to a reflective disk. As the disk spins, pits in the surface of the disk deflect the laser beam and consequently make it flash on and off. A detector picks up the flashing and converts it into the familiar on/off binary code that all computer data is recorded in.

The first thing to say is that the laser used is not a Star Wars-style burn-through-metal machine but a small laser Light Emitting Diode (LED). The LED only produces a small amount of light but, being a laser, there still have to be warnings about not looking directly into it. The reason a laser is needed at all is that the spot of light that hits the spinning disk has to be as small as possible to pick up the individual pits.

The design of the optics is also difficult because it has to move from the edge to the centre of the disk as it reads data. To enable the head to move fast it has to be light and compact. In most cases a small prism is used as a beam splitter to deflect the return beam to the detector.

There are also additional detectors that keep the head on track and in focus. All of this is mounted on a small plate which can be moved by a motor from the centre to the edge of the disc. The faster the head assembly can be move the better. The time to move it halfway across the disk is known as the "average access time" and it can be as long as half a second for a slow drive.

The compact disc is made of a very clear polycarbonate plastic and pits are moulded into the top side. The top side is subsequently covered by a layer of reflective metal and the label is printed on top of that.

Although the pits are on the top side of the disc, it is actually read by shining the laser beam on the bottom. Scratches and dirt on the bottom of the disc can make it difficult or impossible to read the data.

To make this less likely, CD-ROM drives have some of the most sophisticated error correction electronics in use. They can reconstruct missing data from a damaged area without you knowing anything about it.

Of course, if too much data is lost it cannot be reconstructed. What this means in practice is that the effect of a scratch on the surface of the disc depends on where it is. A scratch along the radius of a CD-ROM is far less damaging than one that runs parallel to the circumference. A radial scratch only obliterates little blocks of data over the drive surface but a scratch that follows the line of the data recording destroys large blocks which cannot be reconstructed. This is the reason you are always advised to clean CD-ROM discs using a wiping motion from the centre out rather than round and round.

The pits in the disc are so small that you could get 25 or so across the diameter of a human hair. This means that as well as permanent scratches, dust is a serious problem. A dust particle can easily block out a significant number of pits. Again, so long as not too much data is lost in this way it can be reconstructed by the error correction circuitry.

Even so, some CD-ROM drives go to great lengths to keep the disc clean. Special 'caddies' or trays are often used to hold the discs while they are in the drive. When a caddy isn't used, filtered air currents are created to keep the surface of the disk

CD-ROM facts

- A typical CD-ROM disc contains close to three billion pits. Each pit is so small that only 500 hydrogen atoms could fit across its diameter. It can hold up to 680Mb of data — equivalent to 500 3.5" floppy disks. The single spiral track is about three miles long and its coils are packed together to give about 16,000 tracks to the inch.
- CD-ROM drives can usually play audio compact discs, so you can listen to music while you work at your PC. The converse does not hold true, however: you can't play 7th Guest on the Sony Discman!
- Although storing a program on a single CD-ROM obviously saves hard disk space, many CD-ROM games also use the hard disk for install programs, saved games and overlay files.

the PC

dust free. Of course this only works while the disc is in the drive — what happens to it at other times is up to you! So make sure you store your CD discs cleanly and safely.

The data on a CD-ROM is written as a single continuous spiral — from the centre to the edge of the disc. This means that the head can start from the centre and read all of the data in a continuous stream to the outside.

The only problem is that when a disc spins at a constant rate the outer edge of the disk is actually moving faster than the centre. This means that the head can read the data from the outer edge of the disc faster than it can from the centre. And this creates problems of its own.

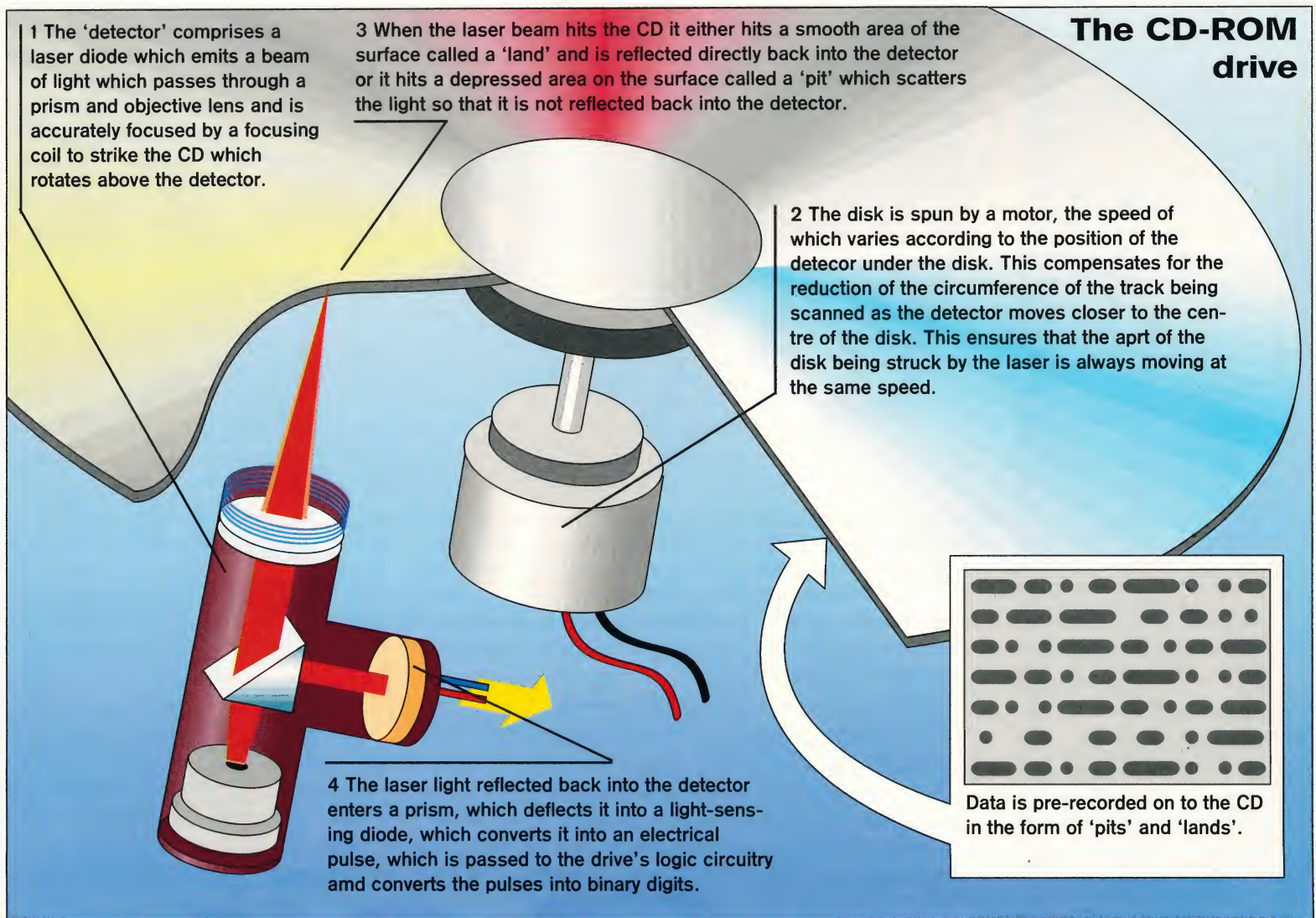
In an audio compact disc this would result in the music speeding up as the disc was played. So to keep the data rate constant it is essential that the speed of the motor spinning the disc is

varied according to the head's position. This varies from 500rpm when the head is in the centre to 200rpm when it is at the outside edge of the disc.

The need to change the spin of the disc to keep its speed over the head constant is actually a nuisance when it comes to reading data as opposed to audio signals. This handicap sets an upper limit on how fast data can be read from a disc.

The very latest CD-ROM drives have overcome this limitation by using a dual spin method. When the drive is reading pure data it spins twice as fast as it does when reading audio data. You can actually hear the drive speeding up and slowing down, as it encounters areas of data and audio signal.

There is no doubt, though, that the need to stay completely compatible with audio CD standards still compromises CD-ROM performance.



HITCH A RIDE WITH SAM & MAX... THEY DON'T BRAKE FOR ANYTHING!!!



I CAN'T THINK OF
ANYTHING MORE
RELAXING THAN
BEING LOCKED IN A
MOVING CAR WITH A
DELUSIONAL PSYCHOTIC
LIKE YOURSELF,
LITTLE PAL!

THAT'S
REALLY SWEET,
SAM. I MAY WEEP
OPENLY.

HIT the ROAD

Holy squimoley! Freelance Police Sam & Max are on the trail of Bruno and Bigfoot and his fiancée the giraffe-neck lady. Nothing unusual there. But when Sam is a contemplative canine and Max a trouble-seeking hyperkinetic rabbit, you know you're talking animal crazy.

Bounding across America the furry flatfoots will take you on an irreverent road trip adventure that will put hair on your back. Collide with tacky tourist traps and intimidate their bizarre denizens.

- Edgy animation!
- Twisted humour!
- Gratuitous antisocial behaviour!
- Mini-games to play when you're at work!
- Roadside attractions your parents refused to stop at!
- Full-screen graphics!
- Easy, pop-up verb and dialogue icons!

**So tune up the car, water the cat and make
a half-crazed beeline to your nearest
retailer for Sam & Max Hit the Road.™
Don't forget to bring clean underwear!**



AVAILABLE FOR THE IBM PC. COMING SOON FOR THE IBM CD ROM.

Sam & Max Hit the Road™ and ©1993 LucasArts Entertainment Company. All Rights Reserved. Used under Authorization. Sam & Max is a trademark of Steve Purcell. LucasArts is a trademark of LucasArts Entertainment Company. The LucasArts logo is a registered service mark of LucasArts Entertainment Company. IBM is a registered trademark of International Business Machines. AVAILABLE FOR THE IBM PC AND COMPATIBLES. VISIT YOUR RETAILER OR CALL 1-800-STARWARS. Marketed and Distributed by U.S. Gold Ltd. Units 2-3, Holford Way, Holford, Birmingham B6 7AX. Tel: 021 625 3366.



U.S. GOLD

REVIEWS

INDEX

Our comprehensive reviews service starts here. Over the next 64 pages, you'll find the best in games, CD-ROM titles and budget releases appraised and dissected in PC Review's inimitable style, as detailed below

Two Minutes of trading places

You haven't exactly had the best start in life. Working in a fish processing plant on a distant planet isn't much of an existence, so when you inherit a spaceship and 100 credits from your grandfather, Commander Jameson, it seems like a dream come true.



This is where it begins: Brocco base on Merlin, a moon circling the gas giant Aster in the Raza 154 system. Merlin is a cold, inhospitable world, hence the domes covering the city. The sooner you get away from here, the better. Or so you think.



All you have at this stage is a rather basic Eagle fighter and 100 credits to start your business empire with. Your initial aim is to make money by trading, so it's a good idea to find out Merlin's major exports. Meat seems like a good bet.



Now it's off to the stock-market to get your pound of flesh. That's about all you can afford with only 100 credits, but I guess you have to start somewhere. When you're stocked up, find a system whose primary import is meat and plot a course there.



Before you leave, you must get permission to launch. If you forget to do that you'll get hit with a big fine, and if you fail to pay your fine you'll get hit by an even bigger laser. Once you're safely in orbit, hit that hyperspace button fly.

ADVENTURES

Return to Zork *Activision*

82

ARCADE GAMES

Eight Ball Deluxe *Amtex/Supervision*

115

Privateer *Origin/Electronic Arts*

76

BUDGET GAMES

CJ's Elephant Antics *Codemasters*

123

Kwick Snax *Codemasters*

123

Hook *Hit Squad*

123

World Class Rugby *Audiogenic*

123

The Magic Candle II *Hit Squad*

123

Chuck Yeager's Air Hit Squad *Hit Squad*

124

Steel Thunder *Hit Squad*

124

Blue Angels *Hit Squad*

124

Links: The Challenge of Golf *Kixx XL*

124

Night Shift *Kixx XL*

124

CD-ROM TITLES

Gobliins/Gobliins 2 *Coktel Vision*

119

Dracula Unleashed *Mindscape*

119

FLIGHT SIMULATIONS

Strike Commander:

Tactical Operations *Origin*

102

ROLE-PLAYING GAMES

Dark Sun: Shattered Lands *SSI/US Gold*

92

SIMULATIONS

Goal! *Virgin*

112

SimFarm *Maxis/Mindscape*

96

Kasparov's Gambit *Electronic Arts*

72

STRATEGY GAMES

Frontier: Elite 2 *Gametek*

64

Patriot *Three-Sixty Pacific/Electronic Arts*

98

Gold Juno Sword *Electronic Arts*

111

Kingmaker *US Gold*

104

Global Domination *Impressions*

107

The Blue and the Gray *Impressions*

100

SHAREWARE

13



TWO MINUTES

This is the closest you'll come to seeing the game in action. We take a series of manoeuvres from the game and explain, step by step, the play required to get through the screens. Not only will you get a flavour of the gameplay, but you may even find some helpful hints in this section!

Alternatively...



Privateer
Origin, £49.99
Rated 5, Issue 26

Origin's answer to Elite, Privateer is a space trading game with similar style graphics and combat to the Wing Commander series. There are about 25 missions, if you can actually find them, but for the most part it involves an awful lot of aimless wandering. It has infinitely less depth than Elite, let alone Frontier, and the combat is inferior to X-Wing. Rather disappointing in all.



Space Legends
Empire, £34.99
Reviewed Issue 22

Three classic space games have been included in this value for money pack: Elite Plus, Wing Commander and the futuristic role-playing game, Megatraveller. Elite Plus has aged very well, and if you haven't played it yet, you might want to try it before graduating to Frontier. Wing Commander is more combat oriented, but remains good fun, and Megatraveller is entertaining stuff.

ALTERNATIVELY

We believe games should be placed in context. You may like the sound of game Y, but suspect it might be too technical, or difficult to control. We'll tell you about other games of a similar style, or subject matter, which may be more to your taste (or warn you off those which are inferior to the game being reviewed).

Techspec	
You need a 386SX with 240 KRAM minimum. Theoretically, Frontier will work with versions as low as MS-DOS 2.0, but memory might be a problem so MS-DOS 5.0 or above is recommended.	
Disk requirements:	
High density	✓
Hard disk only	x
Space taken on hard disk	250B
Graphic modes:	
CGA	x
EGA	x
VGA	x
SVGA	x
Soundboards:	
AdLib	✓
Roland	✓
Sound Blaster	✓
Control:	
Joystick	✓
Keyboard	✓
Mouse	✓
Performance:	
Optimum speed	33MHz
Minimum memory	2MB
Free RAM required	500K
Verdict	
The best score ever	9

TECHSPEC

Detailed and easy to read at-a-glance, this panel will tell you if the game is suitable for your PC. Note that a cross in the SVGA column means that no specific SVGA version is available (use VGA instead), and that the optimum speed rating is a PCR recommendation, not a manufacturer's stated minimum.

RATING

0-2 Dreadful 6-7 Good
3-4 Deficient 8-9 Excellent
5 Average 10 Perfect





Title	Frontier: Elite 2
Publisher	Gametek
Contact	(0753) 553445
Price	£39.99

It's been five years in the making, but now Frontier is finally here. The obvious question is, has it been worth the wait?

Frontier: Elite 2

Whenver anyone mentions space games, you can almost guarantee that Elite is the first game which springs to mind. Whilst many games have been labelled 'classic', this is one game which has truly earned the accolade. It first appeared on the BBC micro back in 1984, before making its way on to a host of other formats including the PC. In its most recent incarnation, Elite Plus, the black and white wire-frame graphics of the original BBC version had been replaced by filled

polygons in full colour VGA, and it even supported sound cards.

All this is convincing testament to Elite's longevity and overall excellence. Shrines to David Braben have been erected in many a darkened back bedroom, and it is here that the acolytes gather round and chant mantras such as, "I remember the time I escaped from Witch Space by wiping out all the Thargoids with only a pulse laser," and, "What about that mission when I blew up the space station and got promoted to Archangel?" Ah yes, those were the days.

But all good things must come to an end, and once you've flown all the missions, kitted out your Cobra spaceship with the best equipment available and attained the coveted rank of Elite, there really isn't a lot left for you to do. Marvellous game that it is, even David Braben has to admit that it is, in the long-term anyway, a bit limited. You can't upgrade to a better ship, missions are few and far between, and it isn't possible to land on planets either. These are just a few of the requests which have consistently cropped up on Elite players' wish

Working in a fish processing plant on a distant planet isn't much of an existence, so when you inherit a spaceship and 100 credits from your grandfather, Commander Jameson, it seems like a dream come true.



This is where it begins: Sirocco base on Merlin, a moon circling the gas giant Aster in the Ross 154 system. Merlin is a cold, inhospitable world, hence the domes covering the city. The sooner you get away from here, the better. Or so you think.



lists, and so David Braben has given us Frontier – Elite 2, which incorporates all these features, plus more besides.

First let me start by saying that, despite being a huge fan of the original, I am not going to let that cloud my judgement. In fact, I was more than a little apprehensive about reviewing Frontier because although Elite was, is, and always will be a great game, the genre has come on a long way since then. Frontier has been in development since 1988 and I couldn't help wondering if it had moved with the times, or whether it remained bogged down in the past. When a game has been so eagerly anticipated for so long, expectations are going to be unrealistically high, and the danger is that unless the game is as near as damn it perfect, some people are likely to be disappointed. Still, let's just say that, prior to seeing the game, I was hoping this wouldn't be the case.

Career paths in space

Frontier works along the same principles as Elite. In Elite, the idea was to buy goods in one place and then sell at a profit somewhere else. Profits could be used to upgrade your ship, adding extra cargo space, installing defence measures such as ECMs or escape capsules and, of



course, buying bigger weapons. As a trader you're always at risk from pirates (and alien Thargoids, for that matter) so the more hardware you bolt on to your ship, the better chance you have of surviving. And then there's the small matter of bounties. You get paid for every pirate you kill, and you also get a certain number of points which go towards improving your ranking. The lowest ranking is harmless; the highest (as if you couldn't work it out for yourself) is elite. And that's it, in a nutshell.

Frontier enables you to do all these things, but unlike Elite, you're not simply limited to trading, piracy and bounty hunting. Whenever you land at

a space station or on a planet, you can log in to a bulletin board and pick up jobs or missions, providing that you are suitably equipped to carry them out. Initially you'll have to do a bit of trading in order to build up your cash, but beyond that, you can specialise as much as you like. You could, for example, set yourself up as a sort of intergalactic taxi service, ferrying passengers and packages from one system to another. Packages don't take up any room, but if you want to carry passengers, you'll have to install some cabins, and these eat into your cargo space like crazy.

Alternatively, you could become a miner by purchasing a mining laser, blowing up asteroids and then collecting the debris in your fuel scoop to sell on the stock-market. Once you've got a large enough ship, you might want to go as far as buy-

The graphics are so much more detailed than in Elite. As well as the texture-mapping, notice the serial number, decals, port and starboard lights and even landing gear on this Cobra Mk III.

Some rules still apply. Just sit in front of a space station, open up and then pick off the police Vipers as they come pouring out of the dock. Nostalgia, huh?

Two Minutes of trading places



All you have at this stage is a rather basic Eagle fighter and 100 credits to start your business empire with. Your initial aim is to make money by trading, so it's a good idea to find out Merlin's major exports. Meat seems like a good bet.



Now it's off to the stock-market to get your pound of flesh. That's about all you can afford with only 100 credits, but I guess you have to start somewhere. When you've stocked up, find a system whose primary import is meat and plot a course there.



Before you leave, you must get permission to launch. If you forget to do that you'll get hit with a big fine, and if you fail to pay your fine you'll get hit by an even bigger laser. Once you're safely in orbit, hit that hyperspace button fly.



It's difficult to get used to the idea of wheels on spacecraft, but there you go. Here I've just taken off from Lave station and am busy enjoying the view.

Bottom right: The shipyard is where you buy ships (funny, that) or upgrade the one you've got with all sorts of fancy hardware.

ing a mining rig which you deposit on a rocky moon or planet, leave for a while and then collect later. However, since the moons and planets in the inhabited sectors are pretty much mined out, you'll have to travel a long way before you'll find somewhere worth exploiting. It isn't the most exciting way of earning a living, but it's one of the most lucrative.

If it's excitement you want, however, you could do worse than join the military. The Frontier galaxy is ruled by two superpowers, the Federation (Blake's 7 fans please note: these are the good guys) and the unscrupulous, slave-trading Empire. During the game, the two powers are engaged in a cold war, so there are plenty of opportunities for spying or carrying out assassinations. Whichever side you choose, you'll have to prove your worth

by starting out with simpler, less dangerous missions such as carrying messages or small components from one military base to another. Once you take on military work you'll be given a rank which increases as you complete missions satisfactorily. Of course, if you mess things up, either by failing to complete a mission or by being consistently late, you run the risk of being demoted. The higher your rank, the more complex and dangerous the missions you'll be offered.

Whatever your chosen vocation, you'll need to find an appropriate ship. You can still fly the trusty old Cobra Mk III of the original game, but with 30 different ships at your disposal, why not try something a bit different? If you aim to earn your keep as an assassin, for example, a single crew fighter would be ideal, but you'll have to fork out for something a lot larger if you want to get serious about trading.

Which brings me neatly on to the subject of crew. If you're going to buy a big ship, you're not going to be able to fly it on your own. Well OK, maybe you could, but the authorities aren't going to let you even take off unless you've got the requisite number of crew members on board. Crew can be hired via the bulletin board, and it's worth noting that the more experienced they are, the more you're going to have to pay them. But take heed: don't make

the same mistake I did. There's nothing worse than shelling out loads of dosh for your dream ship, buying all the add-ons and then finding that there aren't enough people around to join your crew. If you intend to buy a ship that needs additional crew, you'll first have to check and see how many people are available for hire. Unfortunately, you can't employ anyone until you've got a position available, which effectively means that you have to buy first and hire later. You have been warned.

There are three possible start positions, each with their own advantages and disadvantages. The recommended start position is Ross 154, where you begin the game on a moon orbiting a huge, ringed gas giant. Your first ship is an Eagle fighter, which is fast and manoeuvrable but doesn't have much in the way of cargo space. Alternatively, you could start on a newly terraformed Mars complete with blue sky, flying a nicely kitted out Cobra Mk III, or, if you're feeling nostalgic, you might want to begin your game at good old Lave.

The only problem with the last option is that you're already a fugitive in both federal and imperial space, so you have to be careful to stick to trading on independent worlds until you have enough money to pay your fines or are confident enough to take on the authorities.

Sky's the limit

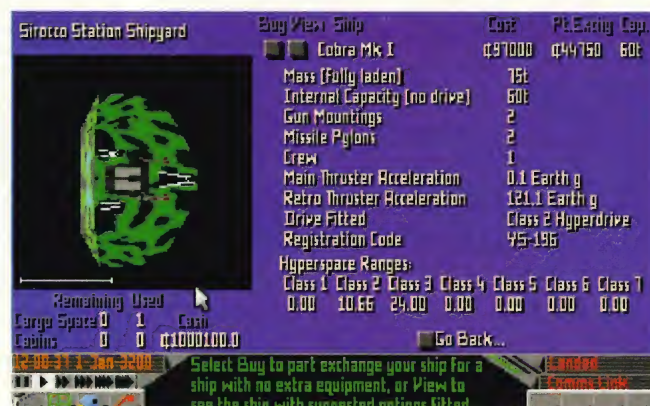
One of the most impressive things about Frontier is the authenticity of the galactic model. David Braben has a strong interest in astronomy, and has gone to great lengths to get it right. Gone are the one star, one planet systems of Elite (the Lave system excepted, of course): instead you'll find systems with up to three stars, each with their own collection of bodies revolving around them.

The star maps are now three dimensional and you are able to rotate through them in any direction you please. I can't really do it any sort of justice by talking

New ships on the block

Yes, all those old favourites from the original Elite are still there, but there are a number of new craft to try, fly or shoot out of the sky.

Ship	Description	Crew	Allegiance
Eagle Mk I	Fighter	1	Independent/Federation
Eagle Mk II	Fighter	1	Federation
Eagle Mk III	Fighter	1	Empire
Falcon	General	1	Federation
Imp Courier	Courier	3	Empire
Imp Trader	Trader	6	Empire
Lifter	Tug	1	Federation
Lion	Trader	4	Federation
Osprey	General	1	Empire
Panther	Trader	15	Federation
Puma Shuttle	Shuttle	11	Federation
Tiger Trader	Trader	5	Federation
Kestrel	Fighter	1	Federation
Hawk	Fighter	1	Federation





With Pro Audio 16, it just sounds that way.

A thousand pounds' worth of hi-tech hardware. A hard disk with more storage than a set of Louis Vuitton luggage. Video accelerators pumping your pixels and refresh rates into orbit.

And your PC still sounds like a broken tranny. And it's not just games that sound awful. You're missing out on a whole bunch of business and music software.

But, install Pro Audio 16 from Media Vision and the stage is set for your PC to produce the most powerful sound around. And all in true CD-quality stereo.

Pro AudioSpectrum 16 is the new standard for professional use, turning any home or business PC into a serious sound system. With 44.1kHz, 16-bit record and playback, a 20-voice synth, Monologue for Windows text to speech converter and SCSI CD-ROM controller, it gives you crystal-clear music and sound effects.

Pro AudioStudio 16. Top of the Pro Audio 16 range, Pro AudioStudio 16 is one of the most technologically advanced sound boards available today. Delivering the same functionality as Pro AudioSpectrum 16, as well as a remarkable voice recognition system that lets you control your PC simply by talking to it.

Pro AudioBasic 16 gives the serious games player 16-bit quality at an 8-bit price. Sonically identical to Pro AudioSpectrum 16, Pro AudioBasic 16 is 100 per cent AT bus compatible, like all the Pro Audio 16 range, and runs all leading games and business software

What's more, every Pro Audio 16 product comes backed by the guarantee that you've chosen the world's largest supplier of 16-bit sound cards. So, if all this sounds too good to be true, pop into your local dealer and make a noise about Pro Audio 16. Or call **021 666 6464** for details.





Recognise this one? It's a Cobra Mk I with a nice, military paint job. Still flies like a pig, though.

Below: Landing on a planet isn't too much different to landing at a space station. You arrive, you buy and sell good and you leave again. The view's nice, though.

Bottom right: The external view is one of the nicer features you'll come across. This is what it looks like when you come out of hyperspace.

about it, though; you will just have to take a look for yourself.

The graphics are also amazing. There are four detail levels, and on the highest setting everything is fully texture mapped. Even so, the game runs at a reasonable rate, and the only time it slows down is if you're flying over a city with the detail on maximum. In space, you'll have no problems at all. Turning the detail down will speed things up a bit (I reviewed Frontier on a 33MHz 386DX, and didn't have to turn it down at all), but even on the lowest level it looks great, thanks to the accurate light-sourcing. If the nearest star is red, then everything will be tinted pink. The attention to detail is stunning.

One thing that this game definitely has over its predecessor is sound. Yes, you still get The Blue Danube every time you dock with a space station, but you also get The Ride of the Valkyries during combat, plus In the Hall of the Mountain King, Night on a Bare Mountain, and many others besides. The music sounds great through a Sound Blaster, and if you're lucky enough to have a Roland board, you're in

Alternatively...



Privateer
Origin, £49.99
Rated 5, Issue 26

Origin's answer to Elite, Privateer is a space trading game with similar style graphics and combat to the Wing Commander series. There are about 25 missions, if you can actually find them, but for the most part it involves an awful lot of aimless wandering. It has infinitely less depth than Elite, let alone Frontier, and the combat is inferior to X-Wing. Rather disappointing in all.

for a real treat. Easily one of the best features on offer is that, rather than simply having the option to turn the music either on or off, you are able to turn off specific tracks. This means that if there are one or two pieces of music you don't like, you can disable them without losing the music you do enjoy.

The control methods are a little different from Elite. You can play using a joystick, mouse, keyboard or whatever combination suits you best. I found that using the mouse to fly was difficult, because movement was restricted by the size of my mouse mat and the length of my arms! In any case, I prefer to use the



Space Legends
Empire, £34.99
Reviewed Issue 22

Three classic space games have been included in this value for money pack: Elite Plus, Wing Commander and the futuristic role-playing game, Megatraveller. Elite Plus has aged very well, and if you haven't played it yet, you might want to try it before graduating to Frontier. Wing Commander is more combat-oriented, but remains good fun, and Megatraveller is entertaining stuff.

keyboard in games like this. In Frontier, up and down is represented by the A and Z keys, whilst left and right are represented by comma and full stop. Although these are the original Elite keys, it's far more instinctive for me to use the cursor keys, leaving my left hand to get on with the business of firing my weapons, altering speed and so on. Unfortunately, you can't reconfigure the keyboard to your liking, so I guess it's something I'll just have to get used to. The other thing I was less than keen on was the fact that, unlike Elite, you can't launch your missiles and have the radar on screen at the same time. This is because your weapons display appears in the same area of the screen as the radar, so you can see one or the other but not both at the same time. It makes combat a fair bit trickier, especially when you're in the early stages of the game and are still getting used to the way things work. Again, it's something I'll get used to, but I found it irritating just the same.



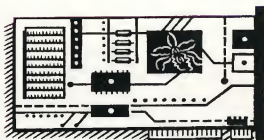
RAVE TO THE WAVE

FREE
'ZOO!' GAME,
PAIR OF SPEAKERS AND
DEMO GAMES BUNDLE WORTH £40!



Call (0256) 817722 NOW for a
FREE
DEMO
AUDIO CD
and rave on!

ORCHID SOUNDWAVE 32



Hey, music to yer ears, the all-new wavetable synthesis DSP techno of the mega mind-blowin' Orchid SoundWave brings games ratatattin' to life with a realistic symphony of sense-tinglin' sounds as cool as yer programmer intended, alright?

Man, wavetable synthesis Digital Signal Processing techno knows no limits! Musically brilliant, with Roland support



and over 190 real sound samples stored on the board, whatever yer game, you'll sure know yer jumpjet from yer hedgehog!

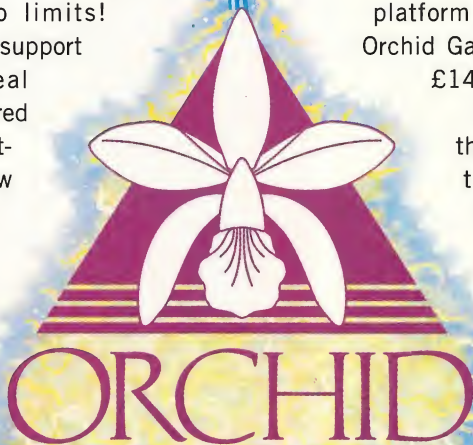
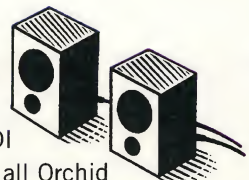
Cool to install, fully SoundBlaster compatible, it supports General MIDI,

Roland MT-32 and Windows Sound System simultaneous 16-bit standards, incorporates a CD interface, MIDI and games ports ... and as with all Orchid products, free sound backin' support in the UK is just a phone call away!

Incredible as it may sound, for starters you can pulsate to yer favourite fast-action platform game or play yer first gig with Orchid GameWave 32 from just £149 plus VAT!

Alright, shake to the sound of the techno-sensational

SoundWave, buzz (0256) 817722 - lines are open daily 8 'til 8 - get down, chill out and rave to the wave!



ORCHID (EUROPE) LTD., BASINGSTOKE, UK. TELEPHONE (0256) 817722 FAX (0256) 64222

© Orchid (Europe) Ltd. 1993. All trademarks recognised. 'ZOO!' © 1993 Gremlin Graphics Software Ltd. Trademarks pending, all rights reserved.



Above: Earth, 3200AD. The weather still looks pretty dismal, so I guess they haven't got the hang of climate control just yet.

Top right: If you want to make a fast buck, try mining. Get yourself a mining laser and a fuel scoop and blast away.



products come on around 10 disks which take an hour to install. It would make our lives a lot easier if all games were like Frontier.

Frontier, of course, doesn't have the advantage of being the first game of its kind. Not only does it have to follow in the footsteps of its illustrious parent, but it also has to see off Elite wannabees such as Privateer (reviewed on page 74) and MicroProse's long awaited Starlord, as well as a whole succession of combat games including X-Wing and the Wing Commander series. Still, despite my earlier reservations, I think I can safely say there isn't a game around which can hold a candle to Frontier. Yes, I still get nostalgic whenever I think of Elite, but Frontier has so much more to offer in the long term.

If you're after a game which looks great, sounds great, plays like a dream and will keep you happy for a long, long, time, you'd be stupid not to consider buying Frontier. And there I rest my case.

■ **Cal Jones**

Initially, I had mixed feelings about this game because I wasn't sure if it would give me the same buzz that I got from Elite. When I talk about Elite, it's with the sort of affection I normally reserve for games beginning with the word 'Ultima'. It was the first space game I ever played, and my enjoyment of it was, no doubt, enhanced by the novelty factor. However, once I'd got into Frontier, I began to appreciate it a bit better. It's not the easiest game to master, that I admit. If my memory serves me well, Elite seemed a fair bit easier to play than Frontier (playing Elite Plus, I managed to achieve elite status within a

week), but then Elite doesn't have nearly as much to offer in the way of variety. Frontier is just so mind-blowingly huge. There's so much to do, and with 200,000,000,000 star systems to visit, each with between one and 20 planets, so much to see as well. It might seem a bit daunting at first, but once you've got your bearings, you know you're going to get months, if not years, of play out of it.

More amazing still is that fact that, despite being such an enormous game, Frontier comes on only two disks and can be played from the floppy drive. This is quite something at a time when similar

Techspec

You need a 386SX with 2Mb RAM minimum. Theoretically, Frontier will work with versions as low as MS-DOS 2.0, but memory might be a problem so MS-DOS 5.0 or above is recommended. A Microsoft compatible mouse is also advisable.

Disk requirements

High density	✓
Hard disk only	x
Space taken on hard disk	2Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	2Mb
Free RAM required	580K

rating
9

Verdict

The best space game ever



W

I

N

T

E

R

MICROPROSE

Two Great Classic
games in the
MicroProse
Winter Collection
Double Value Pack

W
I
N
T
E
RMICROPROSE
CLASSIC

DOUBLE VALUE PACK

COLLECTION

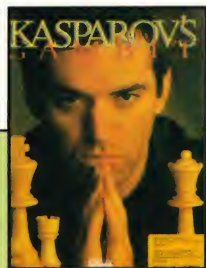
LOOK FOR THE
SPECIALLY
LABELLED
DOUBLE VALUE
PACKS

ONLY
£49.99
IT'S A GIFT!

Double Value packs available in November from a store near you while stocks last!

COLLECTION

WHAT WILL YOU BE TONIGHT?



Title	Kasparov's Gambit
Publisher	Electronic Arts
Contact	(0753) 549 442
Price	£44.99

You've fallen out with FIDE, and gained the sponsorship for your own tournament. There is an expectant hush around the theatre as you prepare to play Kasparov's Gambit ...



Chess is the ultimate role playing game. The game has so much in common with those lovely adventures where you take the role of Elfric the Dwarf or Xyloclone the biorobot from the planet Zgisponk.

For one thing, both chess and RPGs put you in a position of power. In chess, you're basically a general, in charge of an army; in some RPGs, such as Sim Earth, you can even play god. The other big similarity is that chess and your standard adventure game are all about solving problems. In chess, you're overcoming the difficulties presented by your opponent to win the game; in an RPG, you're attempting to overcome the problems posed by the computer, or, more pertinently, the programmer. In both

types of games, you're usually cast in the role the of decision maker.



But chess is a better game than the vast majority of RPGs. Why? Because on a board no bigger than eight squares by eight, chess offers a far more fluid and varied game, far more scope for logical and lateral thinking, than any adventure or 'god' game.

Chess has a mixed history on the personal computer. Early games weren't a patch on the dedicated chess computers you could buy or the super duper main frame efforts. All that changed with the launch of Chessmaster 3000 in early 1992. The game is still regarded as state of the art for moderately serious players even today, despite the appearance of gimmick-laden alternatives like Battlechess.

Needless to say, with the staging of the breakaway world chess championship in London this year, it's no surprise to find at least one manufacturer attempting to cash in on the attendant hype. And the game, Kasparov's Gambit from Electronic Arts, is not bad, not bad at all.

Basic moves

If you are familiar with the basic moves of the pieces, then you'll be able to get a game – of sorts – from Gambit. As a result, the documentation is limited to two manuals, one introducing you to the game of chess, one to the software. The chess manual explains the fundamental rules of the game, such as how the dif-

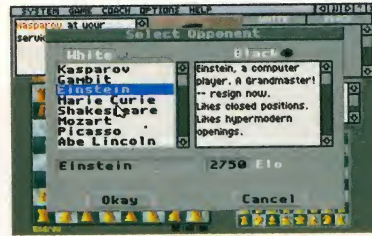
Not content with thrashing our Nige in the world chess championships, Garry Kasparov has lent his name to this chess program. Now you too can be slaughtered by the master

Kasparov's Gambit

Two Minutes of check and mate



The introductory screen: the analysis board at the bottom right hand corner is where the computer tries to predict the following few moves – just how many can be set by you. At the top of the screen are the moves you've played. In the far right corner are a couple of arrows which enable you to move the game back, and give you the chance to play a move again – useful if you've made a mistake.



This is where you can select your opponent. Each one has a different level of skill, and preferences for various tactics. Some like closed play and hypermodern openings (which are usually reviled by Garry himself), others prefer to take as many pieces as possible. Needless to say, Kasparov is damned near impossible to beat, but don't worry, Neanderthal isn't that difficult to take on.



Here am I, playing Jean-Paul Sartre, and – whoops! – silly me, I've just made a big boo-boo. Garry warns me to watch my pawn. He says this as well as the text appearing on screen. But too late, unless I move the game back a couple of moves. Looks as though his queen is going to come storming up the board and cause all sorts of unsavoury problems. Hmm ... perhaps I should cheat ...



The 3D board. His queen has taken my pawn, and now I'm in a spot of bother. You can change the 3D board, but not to anything particularly special, like animated fantasy pieces. (The lack of gimmicks is one of the things I like about the game.) You can't really play a game in 3D mode because, as you can see the board is a bit murky, and you can't really see all the chess pieces that clearly.

ferent pieces can move, and how you can capture. This manual also takes you through some of the game's most fundamental principles, such as the importance of controlling the central four squares during the opening phase of the game. This is neatly done, with the tactics explained in the documentation being illustrated by tutorial programs available through the software. There's also a rather gushy biography of Kasparov, along with an explanation of some of the great games that he's played. If you're interested, you can find these games in the great games section of the software.

Although Kasparov's Gambit requires 11Mb of hard disk space, and takes a heavy toll on your extended memory. To run the game in SVGA colour mode, you need to free up at least 1.35Mb of RAM; to run it in mono VGA, you need a more modest 700K. This means some judicious editing of your Config.sys file is going to be required, or – better still – booting from a floppy disk. But once you have freed up enough memory, you'll find the game will run at an acceptable speed, even on machines based on more feeble processors, such as a 16MHz 386.

The game does not rely on spectacular graphics for its appeal. When you first

load it up, you're greeted with a screen consisting of a large board, which is where you play the game, and an analysis board, where the computer shows you how it anticipates the following few moves. The size of the main board can be adjusted to your taste. You also have the option of changing the colours of the board if you like, but I found the default red and white fine. Whatever the size of the board, the pieces are clear and easy to see. There is a 3D board option, but this is really too murky to play anything approaching a serious game on.

In the top left hand corner of the screen is where each move is recorded in standard notation. This is also where the game records comments on the opening and variations that you're playing. Kasparov's Gambit has an excellent range of openings, although some of the devious variations are only available at the higher levels of play. If you want to practise a particular opening, there's an option enabling you to play it.

Next to the notation square is a video image of Garry himself. This is distinctly blurred at lower resolutions. Garry is given to making the odd comment on the game. For example, make a really good move, and he says: "Just what I would have played!"

Make a mistake, and he says: "I don't think that you're on the right track now." Through the PC speaker, he sounds as though he has had one over the eight. For the record, he seems to have an especial liking for aggressive pawn moves. Don't worry, though, you can switch him off if he

proves too irritating. This is really the only gimmick in an otherwise admirably gimmick-free game.

Across the top of the screen is a range of pulldown menus with which you can access the different options of the game. In the corner are a couple of arrow keys which move you backwards and forwards through a game, as well as a help button. Click on this, and Garry tells you what to do. Unfortunately, he only seems to play at the level that you've chosen to play at. This means that if you follow his advice all the way through – as I did on a few occasions – you actually stand a good

Far left: The quiz program. White to move. Can you see the best place to go?

Below left: The analysis set up screen. If you find it too annoying, you can switch parts, or all of it, off.

Alternatively...



Battlechess 4000
Interplay, £34.99
Rated 6, Issue 18

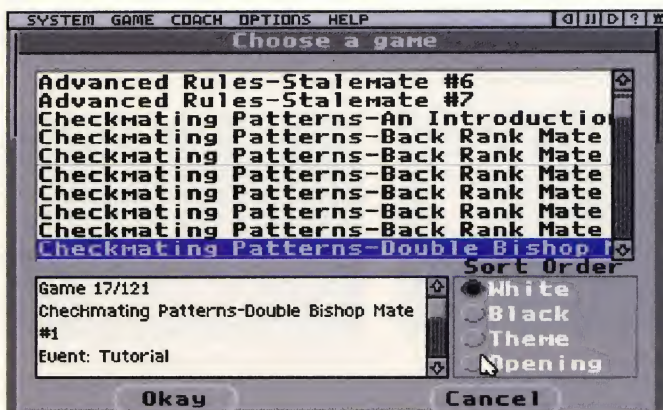
For those of you who just want to play chess for a bit of fun, then Battlechess might be more to your taste than the comparatively austere Kasparov's Gambit. Battlechess doesn't give you anything like the same range of tutorial features as Gambit, or Chessmaster, but it has some fun gimmicks. For example, when one piece takes another, a screen pops up showing you an animated battle between them. However, this is only mildly diverting, and the quality of chess is not as good as Chessmaster or Gambit.



Chessmaster 3000
Software Toolworks, £35.99

Rated 9, Issue 4
The acknowledged computer grandmaster has more features than Gambit. These give you greater flexibility than Gambit on how you want to board to look. These include special sets, including an ornate fantasy set and a space age minimalist set. Very nice, but most players will probably want to stick to the standard 2D mode and the classical set. The standard of play it offers is very high, and there's some good tutorial features including games from the past and a wide selection of openings.





A tutorial screen. This particular one is designed to teach you the best way of playing a variety of endgame combinations.

chance of losing. Still, he can be useful for getting you out of a hole.

The game can be played easily enough with the keyboard, but access to the menus and the different options is far, far easier if you have a mouse.

The game has several levels of difficulty, ranging from novice all the way up to grandmaster. The game supplies you with a range of opponents, each with their own weaknesses and strengths, even at the easier levels. So one player, for example, might prefer an open game, another one might prefer closed positions. And if none of the computer's opponents take your fancy, you can customise your own.

I tried the game out on a range of players of differing abilities. The good club player found Kasparov's Gambit gave him a very good game on master and international master levels. More moderate players found the game was beatable – but not consistently so – on the expert level. Obviously, the standard of play also varies according to the amount of time you give the computer to respond to your move. A minute seems about right.

The game is deliberately geared to help you learn how to play well. At the novice level, for example, the computer will actu-

ally move its pieces to entice you to move yours into better positions.

As well as the basic tutorials already mentioned above, there's an enormous range of practice boards for working out endgame variations and more advanced tactics. There's also a quiz program. This takes positions from the program's database of great games, and asks you what the best move is. Often, a particular principle will be explained beforehand, and the quiz gives you the chance to put it into practice. Any jargon words are highlighted, and clicking on them will bring up an explanation of what they mean. I found this part of the program very useful indeed.

There's a couple of other nice features. If you want to find out how you're getting along, you can have each game rated by the computer to see if you're improving or not. Just above the analysis board is an ongoing rating which gives you an idea of how you're doing according to the computer. This is rated according to the standard that you're playing at, so a daring sacrifice at some of the lower levels will result in the rating swinging massively against you.

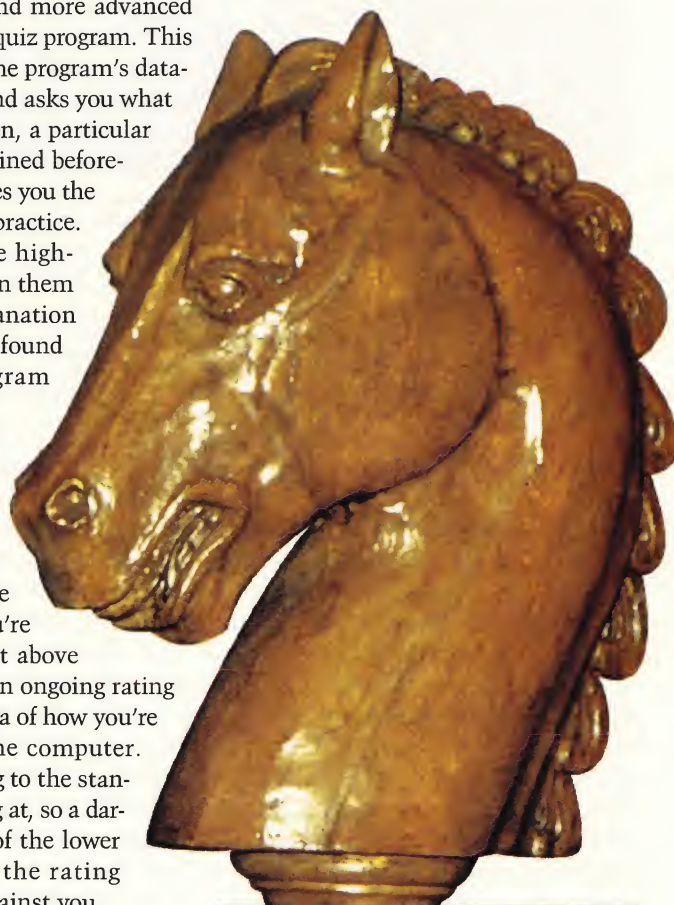
The game is not entirely perfect. It doesn't have as many features as Chessmaster 3000. In some ways, this is good – I can't imagine players who take the game seriously needing a special fantasy set to enjoy themselves. But there are some features from Chessmaster which Gambit could have half-inched to good effect. One feature I particularly liked from Chessmaster highlights those of your pieces threatened by an opponent.

The program also has a couple of strange quirks. On the lower levels, the machine sometimes stopped playing when confronted with an awkward situation, and when the allotted time to make a move had run out. This did not happen at any level above beginner. And it was also difficult to get out of the tutorial section of the program to start a new game against the computer.

But Kasparov's Gambit is, on the whole, a damn good chess game. No matter what level you're at in terms of ability – unless you're really good – the machine will give you a challenging game. The program also lives up to its aim of improving your game. Certainly, it made me think a lot more about my chess, and some of the

basic principles. All in all, if you've been bitten by the world championship bug, then this is a game well worth looking at.

■ **Andy Johnson**



Techspec

A mouse is not strictly necessary to play Kasparov's

Gambit, but it is highly recommended because it makes life so much easier. The other point is that the game demands an awful lot of free extended memory before it will work on your PC.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	11Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	x	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	16MHz
Minimum memory	2Mb
Free RAM required	580K

Verdict

A damn good chess game

rating

8

Things you never knew about Garry Kasparov

- His lucky number is 13: he was born on April 13, 1963, he is the 13th world chess champion; his autobiography runs to 13 chapters.
- Against Anatoly Karpov, Kasparov staged the greatest comeback in world championship chess for 100 years. At one point, Karpov only needed one more game to win the match.
- He was christened Garik; Kasparov is his mother's maiden name.
- His mother, Clara, was also a strong chess player.
- He won his first chess tournament in Baku in 1973.
- He was the youngest competitor in the Soviet Junior Championship in 1973, finishing seventh. In 1976, he won the title.
- He won the World Junior Championship in 1980, one and a half points ahead of the second placed player – a certain Nigel Short.

50 YEARS OF GLOBAL CONFLICT

Campaign II heralds a new generation of War Simulations

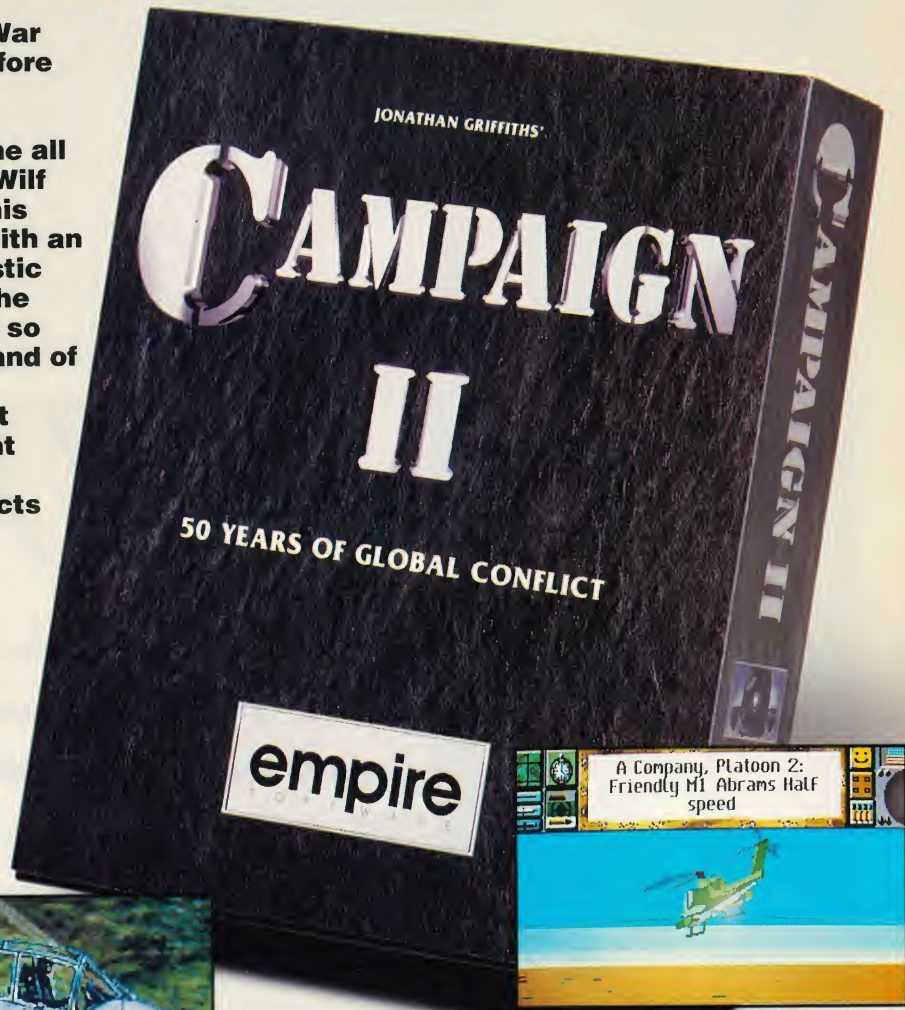
Campaign II heralds a new generation of War Simulations with more depth than ever before and fabulous real-time 3D action.

The depth to Campaign II is provided by the all new strategy. Expert Military consultant, Wilf Owen, from recent conflicts has brought his knowledge to bear on computer gaming with an end result that looks and feels more realistic than ever before. All aspects involved in the running of an army have been considered, so that now you can place yourself in command of either side, at any level in the chain of command. Over 130 templates of the most significant military forces from 56 different nations of the last 50 years have been included to gain an insight into real conflicts such as Korea, Vietnam and Operation Desert Storm.

The action takes the form of fast 3D graphics if you choose to enter the battlefield in one of the 152 types of military vehicles. APCs and Mobile Artillery, utilise weapons ranging from wire-guided missiles, rockets, homing missiles, and machine-guns supported by laser rangefinders to tracer range-finders, night vision, and gun stabilizers.



- Campaign II has emerged as the most comprehensive simulation with new improved strategy, at any level in the Chain of Command (C.o.C.), closely resembling that of a real military situation.
- Hands-on action as you fly helicopters in air-to-ground or air-to-air attacks.
- Deploy the animated infantry during fierce battlefield action in a new improved 3D environment.
- Featuring all the modern weapons systems: guided missiles, rockets, homing missiles, laser rangefinders, gun stabilizers and night sights.



empire
SOFTWARE

CAMPAIGN WAS BIG — CAMPAIGN WAS GOOD
CAMPAIGN II IS BIGGER, BETTER AND QUITE SIMPLY
THE MILITARY SIMULATION OF THE YEAR!



Title	Privateer
Publisher	Origin/Electronic Arts
Contact	(0753) 549442
Price	£49.99 + £19.99 for speech pack

There's more to Privateer than just hauling goods from space station A to planet B. Talking to Sandoval sends you down the road to a Wing Commander-style plot narrative, trying to get info on an alien artefact and the mysterious alien ship.

Privateer

Kilrathi, Retros, pirates, a mysterious alien plot and some trading to boot. Is Privateer an Elite beater or just a trumped up Wing Commander clone?

Like Elite 2, Privateer was a game that I'd been looking forward to with some eagerness. I suspect, like many others, I was seduced by the promise of an improved Wing Commander game but with better graphics, trading, interactive missions, speech and an abundance of those famous cinematic scenes.

But sadly this isn't a description that fits the Privateer that I've been playing. It must be some completely different Privateer because despite the hype and my high hopes, nothing much here seems to have changed. The old (and I stress the word 'old') Wing Commander game engine has just been dragged screaming out of the cupboard, tweaked and happily recycled. OK, the screenshots here may look pretty but the gameplay tells quite a different story.

If this is an example of the way that the Commander style games are heading then tragically Origin's much-loved Wing Commander series is not just going to wither, it's going to turn gangrenous and drop off completely.

But enough doom and gloom, what's Privateer all about? Well, our story begins in the year 2670 ...

A familiar story

After the death of your grandfather, you are fortunate enough to inherit an ageing, pock-marked Tarsus freighter and fired with enthusiasm you pack up your troubles and head out for the Gemini sector, a rough and tumble territory on the Terran-Kilrathi border. As the story begins, you have just become Gemini's newest privateer, a have-a-go entrepreneur making his money wherever and whenever he can. Terran space is, as they say, your oyster.

Because Privateer isn't restricted by a central narrative like its Wing Commander forbears, you can now go wherever

In dark, dystopian futures it's always dark, moodily lit (with broken neon) and chucking it down with rain.



Two Minutes of square-jawed heroics



After Sandoval gets killed and leaves me a strange alien artefact, I decide to pay a visit to Oxford University to do some research. But they won't let me in unless I run an errand for them.



Escort this author in from Nav 3, they said, the Church of Man wants him dead. It seems that Toth here (a dead ringer for Salman Rushdie if ever there was one) is a marked man.



Sure enough, six ships appear and blow Toth's Drayman ship into tiny, glittering pieces. Dodging laser fire, I notice some floating debris and, luckily for me, it seems Toth has ejected.



Great, activate the tractor beam and pick him up. Sadly, I haven't bought a tractor beam so I get sucked into a raging battle which I don't escape from. Where was that saved game?



you want and do whatever you want. Hang out in space bars, run copies of alien pornography to frustrated miners or heroically clear vital space lanes of grubby undesirables. The choice is yours.

The game, as I've mentioned, takes place in the Gemini sector and Gemini itself is split into four quadrants (Clarke, Fariss, Humboldt and Potter) with each quadrant containing a number of star systems. Each of these stars has several major planets or bases which differ in size and function and include refineries, mining colonies and pleasure planets. But despite their varying types, the bases always offer similar services and usually include a bar, the ship dealer (including repair services), a mission computer, mercenary and merchant guilds and the all-important commodity exchange.

Trading places

Like Elite, your fortune in Privateer will probably be made by buying goods from the commodity exchange and then running them from one base to another. For example, if you buy food at an agricultural world you can then sell it on for a

profit at a mining colony where food is scarce. At the mining colony, you can then buy iron or steel, jump back to the agricultural world where the price is higher and sell it on. There's also money to be made by transporting drugs and guns, but as the militia search ships regularly it's rather unwise to incur their displeasure. Like the pirates they're cool and efficient killers when they have to be.

But if the idea of endless grain trading doesn't exactly fill you with excitement, quicker money can be made by accepting a variety of missions on offer at the bases. Each base has a mission computer (a sort of electronic bulletin board), where you can choose paying missions that range from simple cargo carriage to dangerous nav-point patrols. Although the money for these is sizeable, much better missions can be obtained if you join either the merchant or the mercenary guild. These guilds guarantee higher paid missions, but do expect you to pay a nominal joining fee for the privilege.

Combat figures prominently in the world of Privateer, and this is especially true of the missions. There you are, inno-

cently carrying 40 tons of rare gemstones to New Constantinople when you're suddenly head to head with five or six pirates telling you to dump your cargo before you blow. If your fighting skills aren't up to scratch you'll be sucking vacuum within a few minutes. Like Wing Commander before it, missions are very, very difficult so don't go expecting an easy ride.

You see, the better your cargo the more attention you're going to attract in the spacelanes and death can come from a variety of sources. There's your run-of-the-mill pirate; the Retros, who are malicious and often insane and the followers of the Church of Man, a fanatical religious sect who hate technology and destroy its worshippers (namely you). If you make it up to the border's edge you'll also encounter the Kilrathi but be warned, they're even tougher than last time.

Of course, if you're really mercenary you can always sport a patch over one eye, throw your morals out of the window and take up piracy. It's a simple life, there's no fee for joining and all you have to do is hang around space stations putting large holes into innocent traders. Once you've picked your victim and reduced his ship to a cloud of glittering metal, if you've managed to buy a tractor beam you can just flick the switch and pick up any cargo that survived the explosion.

Gemini sector has four major population centres, namely Perry Naval Base, New Constantinople, New Detroit and good old planet Oxford as you see here.

The commodity exchange is where you'll spend much of your early days. You can buy anything here from guns and plastics to movies and textiles.





Privateer continues the Origin trend of using well muscled, square-jawed heroes. This handsome devil is you.

Far right: if you don't like the idea of trading, why take on a mission. At the mission computer you can choose one of six missions that pay cash on completion.

When you've got more money you can upgrade both your ship and its equipment. Turrets, repair droids, jump drives, ECM systems, missiles, they'll all cost you an arm and a leg.

If you find you are struggling with the pirates and Retros, as you earn more money you can upgrade and improve your existing ship by adding new weapons (Mass Drivers, Meson Blasters, Ionic Pulse Cannons), adding more missiles (Friend or Foe, Heat Seeking and Dumb Fire) and by replacing your ineffective scanner. You can also add a jump drive, repair droids and an ECM to transform your ship into not just a cargo ship but a rather nifty weapons platform.

If you manage to acquire an obscene amount of money, you also have the option to trade in your old Tarsus and buy a new ship. How about the Centurion, a nippy fighter or the Galaxy, a cavernous freighter or even the Orion, a ship that's as tough as a 1,000 ton asteroid and steers like one too?

However you choose to conduct your business, the aim of Privateer is to make huge pots of money. With more money you can upgrade your ship and with a better equipped ship you'll have a much better chance of finding and completing the hidden sub-plot.

Did you say hidden subplot?

When I first started playing Privateer, I had to wonder what my motivation was. Why exactly was I doing all this trading? In Elite, for example, I traded and struggled to attain elite status and in the forthcoming Starlord I'm told I have to strive to be Emperor of the galaxy. For a long time, I really couldn't see any point to Privateer at all.

But apparently there is a point to

Privateer because there is, in fact, a central plot. Like Strike Commander, Privateer has a short animated intro sequence that shows your battered Tarsus being pursued by a couple of pirates and ends with a battle in an asteroid field, a battle keenly observed by a mysterious alien spaceship.

The alien ship, a sleek, grey affair with bulbous neon-green attachments is never explained and after the intro I didn't think anything more of it. But the enigmatic ship indicates the presence of a Wing Commander-style plot which is set in motion when you meet a guy named Sandoval in New Detroit.

Chatting to Sandoval kickstarts an underlying plot narrative that takes you across the entire Gemini sector and includes an alien artefact, treachery and a huge amount of killing. Here Privateer

shows its true colours, and is now revealed to be little more than a thinly disguised Wing Commander 3 with some unoriginal trading elements.

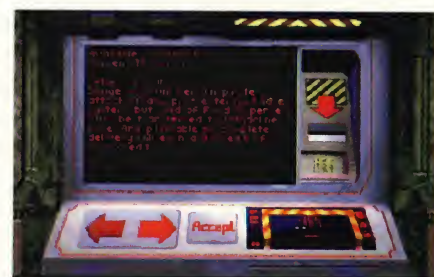
An epic phoney?

You see, as in Wings 1 and 2, Privateer has a sequence of 20 or so missions that lie at the heart of the game. Like the earlier Wing Commander outings, these missions are intensely difficult, but once you've discovered them and begin to play the story the whole sham that is Origin's Privateer starts to rear its ugly head.

Let's imagine Privateer is just another Wing Commander game. You've got your usual combat routines, a bit of inter-ship communication but this time around, instead of starting with a decent ship, you've got to start from scratch.

In Privateer, you have to buy all the equipment you were used to having in the first place, ie, afterburners, mass driver cannons, an ECM, the works. Of course, to buy all these things you need a lot more money and this is where the trading aspect comes in. Because by the time you've traded and fought your way to a decent ship, you've spent countless hours just moving from A to B, from B to A, and jumping occasionally to C.

So is Privateer just Wing Commander with a useless ship? Is the trading aspect little more than a blatant longevity booster? Well, look at it this way. In Wing Commander, once you had finished the



LOST IN TIME

*A step ahead
in adventure
software*



CD ROM - £54.99
IBM PC 3.5" - £44.99

Available from leading retail outlets.
In case of difficulty phone: 0276 684959

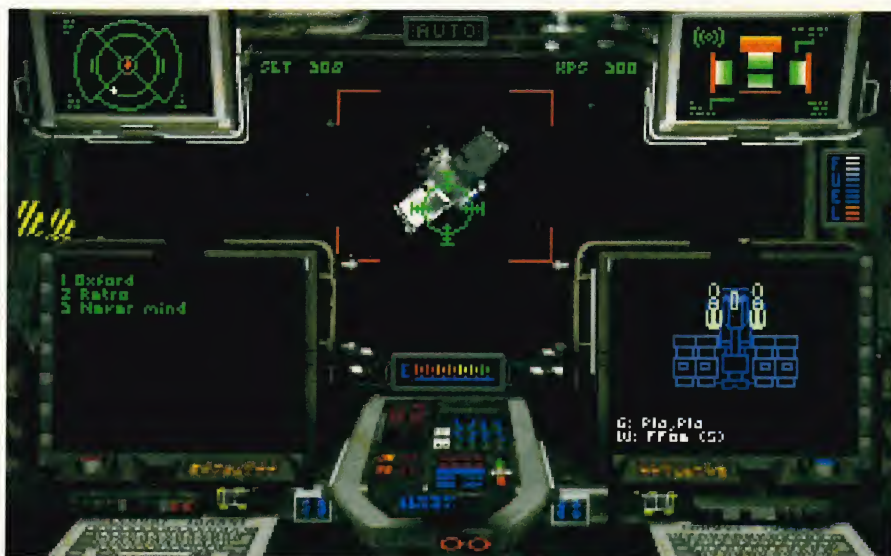


COKTEL VISION



©1993 Coktel Vision. Distributed under licence by Digital Integration Limited.
Digital Integration Ltd, Watchmoor Trade Centre, Watchmoor Road, Camberley, Surrey, GU15 3AJ.

Once again combat plays a major role in Privateer, but after the frantic action of X-Wing, it's all a bit flat, stale and utterly lacklustre.



missions and played out the narrative, that was it, the game ended and you stuck the disks back in the box. Privateer neatly delays this by depriving you of a decent ship. If you haven't got a spare two thousand, you can't even buy another quadrant map, which means you're stuck in Humboldt quadrant until you can. If I hadn't hacked the game code and given myself 10 million credits, I would have been bored stupid in under two days.

I don't deny the fact that Privateer is a superbly presented and polished game – what I am suggesting is that it isn't as good as it should be. One of the main reasons for this is the game engine itself because, compared to X-Wing, the look and feel of the combat in Privateer is so dated it's a positive antique. In fact, after X-Wing it's difficult going back to Wing Commander style combat, especially when it hasn't even changed. Privateer hasn't made any attempt to keep up with the times. Even the famous Origin cinematic sequences are thin on the ground.

Privateer also gives the player no feeling of being in a working universe, a place where if you just stopped still and waited, people would just go about doing their own thing. This was the appeal of Elite because you could follow other traders until they docked, sunskim for fuel and even aggravate the police. Privateer creates none of this and if you pause to watch a Drayman ship, he'll just hang there in space and wobble, more a part of the scenery than a part of the universe.

Long live the DX2

So what exactly is going on? Maybe Origin needs to rethink its strategy, because even if I did have the recommended 486 DX2, playing Privateer would be like watching a silent movie on a Nicam stereo TV. Why? Well, a 486 DX2 has all this power and Privateer doesn't seem to take any advantage of it. It simply needs the extra processing power and speed to shift the ageing bitmapped graphics along. With Chris Roberts at the

Privateer helm I really expected something much, much better. But as I watched yet another bitmapped refinery chug slowly into view on my 33MHz 486 I knew something had gone horribly wrong somewhere along the line.

But if I could forget all this, the gameplay and the graphics included, the greatest travesty of all is the price that Origin is charging for its latest ultimate gaming experience. Not only is the actual game a whopping £49.99 but selling the speech pack separately is nothing short of reprehensible. Origin and Electronic Arts are expecting you to fork out £50 for the game and then another £20 for snippets of speech that are repetitive and badly-digitised to say the least. £70 for the lot? It's an insult to both my intelligence and my wallet.

In the end, despite Privateer's claims to variety, I found it about as captivating as a page of my local telephone directory.

At £70 I'd be thoroughly disappointed if I'd bought this game. Although Privateer will undoubtedly appeal to all you hardened and loyal wingnuts out there, if you haven't got a monster fast machine and you're looking for trading, piracy and some excitement go out and buy Elite 2 instead. Privateer, I'm sorry to say, is a bit of a waste of time.

■ Dean Evans

Alternatively...



Frontier: Elite 2
Gametek, £39.99
Rated 9, Issue 26

As the grandson of the original Elite pilot (boy, does this ever sound familiar), you have to trade, fight, mine and murder your way to the goal of fame and fortune. Caught in a cold war somewhere between two huge federations, Frontier takes the best of the original and expands on it to produce an enormous game. Check out the review on page 64.



Strike Commander
Origin/EA, £45.99
Rated 8, Issue 20

After the Wing Commander series, Origin turned its hand to the fast jets and mercenary missions. Flying for the wildcat squadron, as in Wing Commander, you are involved in a sequence of about 25 missions that include the famous Origin 'talky' bits and the equally famous animated cutscenes. Needs an extremely fast machine, unfortunately.

Techspec

Like almost every other Origin game, Privateer takes up

a lot of disk space, eats an immense amount of memory and needs a very fast machine. Privateer does not, it says on the box, support disk compression.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	20Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	x	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz 486
Minimum memory	4Mb
Free RAM required	570K

Verdict

A jaded assembly of old game routines

rating

5

MULTIMEDIA. DIRECT.

CD-ROM DRIVES

Panasonic Media Pro CR-562

The CD-ROM 'Killer' Drive. The one that everyone is talking about. Now with an incredible bundle of CD-ROM's and software.



UNICA OFFER ONLY £179

Double-speed, Multi-session, Tray loading, Kodak Photo-CD compatible and it will even plug directly into your SoundBlaster Card.

The Media Pro CR-562 comes with: Opti-CD Caching Program (Increases CD access time by up to 20 times),

Dr Halo Desktop Imager CD-ROM, Mantis CD-ROM game by Microprose, AA Hotels & Restaurants Guide CD-ROM

and Corel Professional Photo-CD Sampler with CorelMosaic, Corel CD Audio Player and Corel Photo CD Access Software

INTERNAL DRIVE £179 EXTERNAL DRIVE £259

DRIVE ONLY INTERNAL £149 EXTERNAL £229

ISA INTERFACE (SUITABLE FOR ALL PANASONIC DRIVES) £20
TWIN DRIVE TOWER WITH INTERFACE £495

MITSUMI

CRMC-LU005 Multi-session CD-ROM drive

£115

With Kodak Photo-CD Access Software

£125

With Bundle of CD-ROMs - Hutchinsons Encyclopedia,

Desktop Bookshop, AneCDote

£139

TOSHIBA

XM4101B

£199

XM3401B Drive only

£259

KT3401BA with ISA interface

£299

XM3401S External Drive only

£359

KT3401SA External with ISA interface

£399

With Micro-channel (MCA) SCSI interface

+ £100

XM3404S 4 drive tower

£1595

XM3407S 7 drive tower

£2450

PIONEER

DRM600

£599

DRM604X

£849

NEC

Multispin 84 Internal

£279

Multispin 74 External

£299

Multispin 38 Portable

£249

CREATIVE LABS INC.

OMNI-CD CR563 Internal

£225

OMNI-CD CR563 External

£275

MUSIC PRODUCTS

ROLAND

SCC1 Sound Canvas Card

£299

SC7 External GM Sound Module

£225

PC150 Midi Keyboard

£119

PC200GS 49 key GM/GS compatible DTMS keyboard

£175

CS-30 Stereo Computer Audio Monitor

£99

MA-7 Stereo Monitor Amplifiers (2 x 7w)

£129

MIDISOFT

Midisoft Studio for Windows v3.1

£119

MusicMentor with Recording Session for Windows

£89

Midi Kit with Recording Session for Windows

£55

Sound Impression

£49

MusicMagic Songbook

£25

Midisoft Sound Explorer

£15

World of Music Sampler (Floppy)

£17

Multimedia Music Library (Floppy)

£35

7th Guest

£25

Animals of San Diego Zoo MPC

£19

Art of Multimedia

£20

Arthur's Teachers Troubles

£15

Authorware Star

£35

Battle Chess

£20

Beauty & The Beast

£15

CD Game Pack 1

£10

CD Game Pack 2

£15

Chessmaster 3000 MPC

£19

Composer Quest

£20

Dinosaur Adventure

£25

Electronic Lib of Art Vol 1, 2 or 3

£35

Family Doctor

£30

Great Cities of the World Vol 1 DOS

£10

Grolier MPC Encyclopedia

£55

Guinness Disk of Records 1992 DOS

£10

Hutchinsons M/M Encyclopedia

£55

Jones in the Fast Lane

£15

Kings Quest V

£15

Kodak Photo CD Access

£15

Loom

£15

Mavis Beacon MPC

£20

Mayo Clinic

£20

Micrographix Graphics Works

£50

Mixed Up Mother Goose

£15

Monkey Island

£20

Q&A Database

£45

Toolworks Reference Library

£10

World Atlas 3.1 MPC

£15

World Atlas 3.2 MPC

£20

BUNDLE SPECIALS ARE BACK

You can buy these CD-ROMs at these silly prices and get 10% off all our other CD titles when you buy a CD-ROM drive, Multimedia Kit or MPC Computer.

SOUND CARDS

Media PRO

Sound Kit

THE 1st 16-BIT SOUND CARD BELOW £100

Logitech Soundman 16 Sound Card & Speakers

£99

FREE GAMES
Zool Lemmings
Indy 500

CREATIVE LABS INC.

SB Version 2.0 Deluxe

£54

Soundblaster Pro (deluxe edition)

£84

SB Pro Mitumi

£84

Soundblaster Pro MCV (for MCA bus)

£165

SB Pro 16 Basic (Sound Card only)

£115

Soundblaster Pro 16

£129

Soundblaster Pro 16 with advanced signal processor chip

£159

Waveblaster, add-on for SBPro16

£145

Soundblaster 16 MCD

£139

new SB16 with interface on board for Sony, Mitumi & Panasonic

£139

CD-ROM Drives

£169

Soundblaster 16 MCD AdSP

£169

Soundblaster 16 SCSI-2 - SCSI-2 version

£199

also available with Ad SP Chip

£199

MEDIA VISION

Pro Audio 16 Basic

£109

Pro Audio Spectrum 16

£129

Pro Audio Studio 16

£179

PORTABLE Sound PLUS



PORTABLE SOUND PLUS™ is Sound Blaster and ADLIB compatible.

Buy it. Plug it in and you are ready to roll.

With PORTABLE SOUND PLUS™

you don't need to buy anything else!

£139

SCANNERS

UMAX

UC630

£799

UC840

£1,195

UC 1200SE

£2,495

LOGITECH

256 Colour

£279

256 Greyscale

£174

32 for Windows

£115

Photomax Plus

£369

NEW VIDEO CUBE

It's totally awesome... £39

A radically new CD-ROM game

that pits you against the Video

Cube. It's like the cube puzzle

game you couldn't put down...

only way cooler!

Awesome Visuals

(Over 100 videos)

Killer Sound Effects

(8 and 16 bit compatible) Shredding Music

£9 SPECIALS

Chestnut CD-ROMs £9

California Collection

CICA April 93

Great Cities of the World

Notion of All Clipart

MPC Wizard

Original Shareware

PC Sig Games

Phoenix 3

Selectware

Shareware Gold II

Simtel-20 April

So Much Shareware

VGA Spectrum

Visions of Saturn

Bibles & Religion

Clipart Goliath

Colossal Cookbook

NEW Computer Reference Library

Deathstar Arcade Battles

Dictionaries & Language

Encyclopedia of Sound

NEW Gardening

Ham Radio

Our Solar System

Sound Sensations

Technotools

Too Many Typefonts

World Traveller

£75 FOR TEN

UNICA LIMITED

UNICA HOUSE · MOWBRAY STREET

STOCKPORT · CHESHIRE · SK1 3EJ · UK

FAX: 061 477 2910

ORDER HOTLINE 061 429 0241



All prices exclude VAT & carriage
£4.00 CD-ROM & Software £10.00 Hardware
Prices and contents of packs are subject to change. E & OE

MULTIMEDIA UPGRADE KITS

CREATIVE LABS INC.

Sound Blaster CD 16 Discovery Kit Internal

£429

Sound Blaster CD 16 Discovery Kit External

£469

Sound Blaster CD 16 Professional Kit Internal

£429

Sound Blaster CD 16 Professional Kit External

£469

MEDIA PRO

Media Pro Entry Level Internal

£299

Media Pro Entry Level External

£399

Media Pro Enhanced Internal

£499

Media Pro Enhanced External

RETURN TO
ZORK

Title	Return to Zork
Publisher	Activision
Contact	(0295) 252524
Price	£45.99

Return to Zork

For veterans of the genre, Zork conjures up memories of halcyon days of text-only adventures. This sixth instalment in the series now boasts speech and animated graphics

If you've never played an adventure before, you've probably never heard of Zork. Anyone who knows the Great Underground Empire intimately can skip the next couple of paragraphs – but for the rest of you ...

Zork was the original personal computer adventure game. It simultaneously launched text adventures and established the reputation of its creators, Infocom, as masters of the format. Boasting some of the best descriptive prose anywhere, impressive technical achievements and a consistently strong plot, it helped establish a whole new genre for the emerging home computers.

Four more mainstream games were set in, above or across the sea from the Great Underground Empire. Zork II: The Wizard of Frobozz provided a new, tougher challenge, and Zork III: The

Dungeon Master concluded the original trilogy with a fair stab at interactive fiction. Beyond Zork, set in the kingdom of Quendor, featured an auto-mapper and a function key repeat-command facility, but was still text-only. Zork Zero represented a peak in Infocom's achievements, and included incidental puzzle graphics, an auto-mapper and a new, more friendly parser. Two more Zork titles – Zorkquest 1 and 2 – were part of Infocom's experimental Infocomics range, but with CGA graphics and a few technical and structural drawbacks they didn't quite live up to their potential.

This historical background is important because any new title bearing the name Zork automatically raises expectations. It's a series that consistently broke new ground in technological achievement and imaginative detail, and anything which

This sequence of events taken from the very beginning of the story will give you some idea about the main game elements. New puzzles, speeches and locations mark your progress.



You descend from the Valley of the Vultures to find a lighthouse at the side of a river. There doesn't seem to be anywhere else to go, and after a lengthy monologue the lighthouse keeper lets you in.



continues the line should create a big splash in the adventure game pond.

Unfortunately, Return to Zork is more of a ripple than a splash. Its plot, characters, tough puzzles and innovative features are quite typical of the series, but its unrestrained use of new technology and its mostly linear structure are a huge inescapable let-down.

Zork talk

You can read the plot on the back of the box if you want, but since you've paid good money for this magazine, I'll summarise the story for you here.

Legend has it that the Great Underground Empire of Zork was destroyed and all evil magic dispersed. However, the IT&L Corporation reckons it has rediscovered Zork beneath the Valley of the Sparrows. Since this revelation, people and property have vanished into thin air, and nightmares, madness and paranoia have increased.

You, playing the ubiquitous unwitting traveller who always seems to get roped into tasks like this, have to save Zork

from the forces of evil. And so on.

The package includes excellent documentation (the hugely informative and beautifully written Encyclopaedia Frobozzica – well worth a read), some information on the actors who helped make the digitized characters more realistic, a technical help card and the disks. On the whole, a solid base.

You load up the game and find yourself in a mountain pass. You listen to a speech. You try to talk to a vulture. You examine a sign and see that there is a puzzle to be solved.

These three actions encapsulate the sometimes tiresome and repetitive structure of the whole game. You talk to people, you try a few things out, you solve a puzzle, you progress, you think about the puzzles you haven't solved, you scratch your head, you talk to people again ... and so it goes on.

It's a slow process and there isn't much fun involved. A game such as Day of the Tentacle is packed with humour to relieve the mundanity of repeated actions, and consistently strong humour is something

which this game lacks. In addition, the original Zork trilogy actually left it up to your imagination to fill in any gaps and didn't force you to read everything twice if you didn't want to.

However, because of its powerful visual and aural effects, Return to Zork insists relentlessly that you listen to the same speeches over and over again. This, as you can probably imagine, becomes very irritating very quickly.

But more of that later. Modern graphic adventures require a good icon-based interface to minimise frustration and enable you to concentrate principally on solving puzzles. The interface used to direct your actions here is very good, and definitely the strongest technical feature in the game.

Everything is mouse controlled (with keyboard and joystick options) and is based on two icon panels accessed by clicking the left and right mouse buttons. One panel reveals the inventory, the other a variable display of action icons. The icons available vary according to the location you're in and the item you're holding at the time.

For example, at the start you have a box of matches. You can use this to light a match, and use the lit match to burn things. Most objects can be picked up and

The first major mystery which you face is discovering what really happened to East Shanbar. Even when you do learn the truth, you still have to do something about it ...

As you progress, you can take photos of places you visit and record conversations. Showing these to strangers could reveal absolutely vital information.



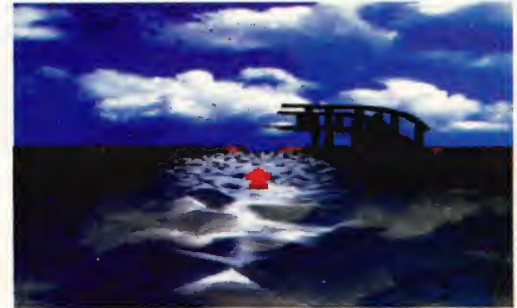
Two Minutes spent trying to find a way south



Adopting a 'fascinated' pose, you glean information from the lighthouse keeper about your map, inventory and photographs. Your tape recorder automatically records his most significant replies.



The keeper told you that the road to the south was impassable (you die if you try to use it), so you need to find a new route to West Shanbar. That river looks a likely alternative, if only you could find a boat.



Some handy objects behind the lighthouse help you build a raft, so you're soon gliding down the river. Now ... do you grab hold of the bridge or carry on drifting? The wrong choice will cost you your life.

An empire on one disc!

There will be two CD-ROM versions of *Return to Zork*, an "enhanced" version of the game, and an MPEG version. The "enhanced" Zork costs slightly more (£49.99), but offers a few advantages (as well as some problems). The program is packed on to one disc and features excellent sound and graphics; however, apart from some impressive movie cut-sequences, the gameplay is essentially the same. In addition to the adventure itself, the CD contains 25 high-quality orchestral tracks which you can listen to on a standard CD-player.

Unfortunately, you need a data transfer rate of at least 150K per second to enjoy the game at all, and the recommended speed is 300K per second. If you slip below the minimum level, the quality of the movie sequences is affected, and at around 100K the speech becomes patchy. A slow VGA adapter or low processor speed will also affect the quality of the sound.

A further crucial problem is that this version uses up a massive 42Mb of hard disk space when fully installed. In practice, you don't have much choice about this, since if you decide against installation the action slows considerably.

However, if you have the right equipment and enough hard disk space, and you want convenience in a game with impressive graphics and sound effects, the CD option is preferable to its disk-based rival. The standard of acting may not always be superb (see the cast list, overleaf) and the game itself may lack bite, but, in general, the CD format is well used.

The standard CD version described above shouldn't, however, be confused with the MPEG Zork, which will be bundled with the ReelMagic card and feature near-TV quality graphics (see the article on ReelMagic, in PC Review, Issue 25, for more details on this).



used on people, places or other items.

Naturally, all the expected traditional adventure commands such as giving, throwing, dropping, reading, using, drinking/eating are also readily available. However, in addition you have special commands for particular situations, which may enable you to pour out the contents of a glass, or bind two objects together to create a third, new item.

This system is so flexible that you can

make mistakes very easily, so it's not actually such a great idea to go around burning everything or stabbing people with the knife. You're well advised to save your position often (there are 99 saved game slots). If you ignore the advice, then you're going to have plenty of opportunity to marvel at the subtle variations in the death sequences.

There are many different and neatly-drawn characters in *Return to Zork*, and

most of them have something useful to offer. A couple of innovative features assist in the search for clues. You can take snapshots of locations and people and ask other characters to comment on them, and you have a tape recorder which automatically records every useful snippet of information. You can replay what you've heard to other characters, sometimes provoking a reaction.

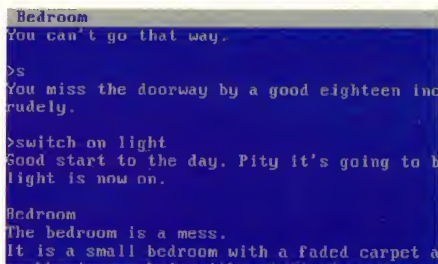
In practice, this can be irksome, since even after a bit of intelligent filtering of the information available, you still waste a lot of time relaying speeches to people who don't want to listen, or showing pictures to people who aren't interested. It's a nice idea, but it doesn't quite come off in this game.

The same can be said of the sound and graphics. There is a huge amount of digitised dialogue in the game, but most of it is disappointingly fuzzy (using a Sound Blaster Pro card). The acting owes more to sitcoms than stage or cinema, but it suits the off-beat nature of the game well.

However, the real problem I had with the sound was the speech. Some characters drone on and on, and because you can't skip a speech once it's started, you're occasionally forced to listen to the same monologue several times. It's dull, it's annoying and it ruined much of the atmosphere for me. Text adventures did sometimes repeat themselves, but they did it silently.

Apart from the animations, the graphics are competent without being outstanding, and occasionally lack realism or an easily understood perspective. In general, *Return to Zork* boasts few graphical innovations, and is certainly a long way behind the experimental 3D world of a game such as *Betrayal at Krondor*.

Alternatively...



The Lost Treasures of Infocom Activision, £29.99

If you yearn for the heady days of text adventures, this compilation is exceptional value for money. Amongst its 21 all-time classics (ie, very old games) are the legendary *Hitchhiker's Guide to the Galaxy* and all previous instalments in the Zork saga: *Zorks I, II and III*, *Beyond Zork* and *Zork Zero*.



The 7th Guest Virgin, £69.99 Rated 7, Issue 20

Despite stunning visual and aural effects, in gameplay terms this game is a bit of a loser. Set in a haunted house, it features a measly 23 puzzles, some of which are ridiculously easy to solve. However, excellent movie sequences and innovative technology save it from obscurity.



Daughter of Serpents Millennium, £39.99 Rated 7, Issue 18

With a linear plot, a strong link between puzzle-solving and progress, an intuitive interface and excellent graphics and sound, this is a very close cousin to *Return to Zork*. Zork has a slight edge in technological terms, but *Daughter of Serpents* is by far the more enjoyable game.



**WHEN THE STREET JUST AINT
TOUGH ENOUGH...
GO PLAY IN THE PARK**

IF IT'S NOT JURASSIC PARK™ IT'S EXTINCT

**JURASSIC PARK
GAMEPLAY HELPLINE**

ALL CALLS ARE CHARGED AT AN FRIENLY PER MINUTE CHEAP
RATE AND 45 PENCE PER MINUTE AT ALL OTHER TIMES
THE MAXIMUM LENGTH OF A CALL WILL COST £2.40
PLEASE OBTAIN PERMISSION TO CALL
FROM THE PERSON WHO PAYS THE BILL

CALL: 0839 654154

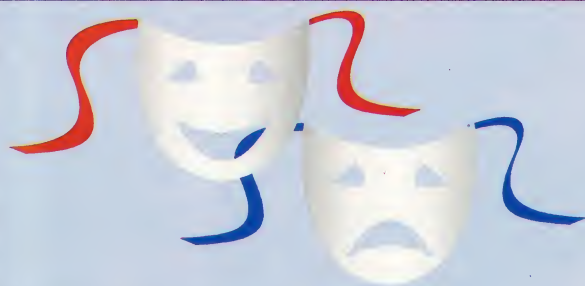
AVAIL. LABLE ON THE UK ONLY
ALL CHARGES AND SERVICES CORRECT AT TIME OF PRINTING IN 7.99
OCEAN SOFTWARE LTD 2 CASTLE STREET, CASTLEFIELD,
MANCHESTER M3 4LZ ENGLAND

FOR ENQUIRIES TEL: 0800 840 087 OR FAX: 0800 840 087
S.O.S. HELPLINE UNIT 29, THE CHURCH BUILDINGS, PRYER STREET,
HOLDSWORTHAM, WYLL, LUT.



**PC COMPATIBLES
CBM AMIGA
GAME BOY
SUPER NINTENDO
ENTERTAINMENT SYSTEM**

**Nintendo
ENTERTAINMENT
SYSTEM**



Those actors in full

At no expense spared, Activision has used real-life actors to provide dialogue and digitisations in *Return to Zork*. Here is the full dramatis personae and their track record so far:

Jason Hervey (The Wonder Years)	Trolls, Troll leader
Robin Lively (Doogie Howser, Twin Peaks)	Fairy
A J Langer (In the Heat of the Night, Hangin' with Mr Cooper)	Rebecca
Ernie Lively (Passenger 57)	Moodock
Michael Stadvec (General Hospital)	Blacksmith, Ancient God
Julie St. Claire Capone (Sid & Nancy)	Holy Woman
Howard Mann (Mr Saturday Night, Moonlighting)	Keeper
Tamara Daniels (Nick for Kids hostess, Fatal Attraction, Awakenings)	Mushroom
Raul Rizik (Broadcast News, Growing Pains)	Mayor
Nino & Leonard Surdo (Major Dad, Days of Our Lives)	Dwarven General, Dwarven Mine Leader
Michael Johnson (227, Pieces of a Man)	F Rooper
Jason Lively (European Vacation)	Ben Fyshin
Will McAllister	Trembyle
Lori Lively	Tree Spirit
Michele Dahlin	Witch Itah
Harold Smith	Boos Myller
Elaine Lively	Molly Moodock
Charles Carpenter	Guardian
Matt Grimaldi	Cliff
Edan Gross (Nortchen Exposure, Empty Nest)	Waif
Sam Jones (Flash Gordon in the film Flash Gordon)	Bowman



Farewell to Zork

Minor inconsistencies add to the general feeling of disappointment. To take only a couple of examples from the very beginning: a picture captioned "6 Zorkmids" actually shows over a dozen coins, and a character described as "too drunk to answer" suddenly becomes talkative when correctly prompted. These might seem like trivial concerns, but when so much else in the game is irritating, these details diminish your enjoyment.

The good news is, however, that *Return to Zork* is a reasonably large game with plenty to do, and making progress isn't particularly easy.

The puzzles are often tough – and occasionally even silly – and their solutions are based on a combination of mythology, numerology, terrible puns, practical solutions, nursery rhymes and even recent events. Cracking a puzzle involves an awful lot of head-scratching followed by immense relief.

In addition, there are plenty of references to the previous instalments to please nostalgic Zork fans, and the graphics are, on the whole, a bonus.

The bad news is that in spirit this is basically an old-style text adventure enhanced by graphics, speech and an icon interface. The repetitive puzzle structure,

repeated speeches, constant travelling between locations and the need to use exactly the right word (or icon, or object), are all a disappointment. There are plenty of innovative features, such as the tape recorder, photo album and the bizarre, half-modern game environment – but, in the final analysis, these just aren't enough to give *Return to Zork* a significant edge over its rivals.

■ **Gordon Houghton**

Techspec

This eats up almost 24Mb of hard disk space. You need

DOS 5.0, and any of the three major sound cards; others are also supported. The game makes use of extra XMS/EMS memory up to 4Mb. I'd recommend a mouse, since both joystick and keys are slightly more awkward.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	24Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	640K
Free RAM required	580K

Verdict

An old-style adventure game in new clothes

rating

6



NOW ...a soccer simulation that combines realism with fast arcade action! Check out just some of the many amazing play features:

EUROPEAN CHAMPIONS

COMPETE TO BECOME THE PREMIER TEAM IN EUROPE



***TWIN VIEWS** - Select either FAST-ACTION TOP-DOWN or the realistic GRANDSTAND VIEW. Just hit the key and the switch is made - the game doesn't stop for a moment!

***TACTICS** - Select one of the many, easy set up BUILT-IN-TACTICS options or DESIGN YOUR OWN!

***INTELLIGENT PASSING** - Choose one of three different modes for pixel-perfect passing.

***ONE TOUCH FOOTBALL** - Build up moves quickly and fluidly. Anyone can look good, and if you are good you'll PLAY LIKE A GENIUS.

***SPECTACULAR** - Large, SUPERBLY ANIMATED players look as if they're ready to burst out of your screen!

***REALISTIC** - Variable wind direction, wind speed and pitch conditions that really INFLUENCE THE GAME-PLAY.

***ACTION REPLAYS** - Select to replay in either GRANDSTAND or TOP-DOWN mode. Featuring FULL VIDEO CONTROLS (rewind, fast forward, freeze frame, slow motion). You can even change the camera angle during a replay to find out what was happening elsewhere on the pitch!

**AMIGA, ATARI ST,
PC & COMPATIBLES**



OCEAN SOFTWARE LIMITED • 2 CASTLE STREET •
CASTLEFIELD • MANCHESTER • M3 4LZ •
TEL: 061 832 6633. FAX: 061 834 0650

MAGIC MEDIA

**TECHNICAL
SALES LINE**
081-343 9933

Sound Board Bundles

SOUNDBLASTER V.2 FUN PACK £69

Soundblaster V.2 card
Speakers
Joystick
Indy 500 & Lemmings games

SOUNDBLASTER PRO MUSIC PACK £156

Soundblaster Pro card
Speakers & microphone
Midi adaptor cable
Midisoft recording studio

ORCHID FUN PACK £58

Orchid sound producer card
Speakers
Joystick

ROLAND DESKTOP MUSIC SYSTEM £259

SC-7 GM Sound module
Turbo Trax & Band-in-a-box
Speakers



GRAVIS PACK £136

Gravis 3D Ultrasound card
Gravis Analogue Pro joystick
Chuck Yeager Flight Sim



OPEN 6 DAYS A WEEK

Mon-Fri 9am - 7pm
Saturday 10am - 2pm

**PERSONAL CALLERS
WELCOME**

*Student Discounts
Available*

*If you're an education
authority, government
establishment or quoted PLC
Just Fax or send your order
Fax No:*

081 446 4313

Sound Boards



GRAVIS ULTRASOUND 3D £129

CD quality sound card
32 digital audio voices
16 stereo digital voices
256K upgradable on-board memory
DOS and Windows utility software

GALAXY NXII £78

Soundblaster Pro, Adlib, Disney
and Covox compatibility
CD-ROM interface
Midi / game port
Free speakers
DOS and Windows utility software

GALAXY NXPRO EXTRA £97

Fully featured stereo card
Soundblaster Pro, Adlib, Disney
and Covox compatibility
Universal CD-ROM interface
Midi / game port
Free speakers
DOS and Windows utility software

GALAXY NXPRO16 £142

Fully featured stereo card
Soundblaster Pro, Adlib, Disney
and Covox compatibility
Universal CD-ROM interface
Midi / game port
Free speakers and microphone
DOS and Windows utility software

ORCHID SOUNDPRODUCER £49

Soundblaster V.2 & adlib compatible
Midi/game port
Free speakers

ORCHID SOUNDPRODUCER PRO £99

Fully featured stereo card
Soundblaster Pro, Adlib, Disney
and Covox compatibility
At-bus / SCSI CD-ROM interface
Midi/game port
Free speakers and microphone
Free Orchid Voice Note software

PORTABLE SOUND PLUS SYSTEM £144

Fully featured Portable Audio Unit
Soundblaster & Adlib compatible
Utilizes Parallel Port
Pass thru connector
16 bit Stereo
DOS and Windows utility software

MEDIA VISION PRO AUDIO STUDIO 16 £166

Fully featured 16 bit stereo card
Soundblaster Pro, Adlib, Pro Audio
Spectrum compatibility
SCSI CD-ROM interface
Midi / game port
Free microphone
DOS and Windows utility software

THE MULTIMEDIA SPECIALISTS

CD-ROM Drives

TOSHIBA 3401B/S

200ms Access time
330KB per second transfer rate
XA standard
Single & multisession
Complete with SCSI interface card
and cables
FREE PHOTO CD SOFTWARE

Internal £359
External £459



TOSHIBA 4101B/S

350ms Access time
300KB per second transfer rate
XA standard
Single & multisession
Complete with SCSI interface card
and cables
FREE PHOTO CD SOFTWARE

Internal £279
External £357

MITSUMI 005 £135

350ms Access time
175KB per second transfer rate
Complete with interface card and
cables
Multisession

Photo CD software £18

PANASONIC 562/563

320ms Access time
300KB transfer rate
Multisession and Dual-Speed
Auto Lens Cleaning



Internal £168
External £224
Interface Kit £55

TEAC CD-50 £297

265ms Access time
335KB transfer rate
Dual Speed and SCSI
XA Compliant

FUTURE DOMAIN SCSI CD KIT

INCLUDES CONTROLLER, DRIVERS
CABLE AND POWER SCSI SOFTWARE

£57

PHILIPS 462 £199

375ms Access time
150KB per second transfer rate
Interface card and cables
Multisession

PIONEER DRM604X £975

Six Disk Auto-Change Magazine
Quad speed
600KB per second transfer rate
30ms Access time

Video Boards

VIDI PC VIDEO CAPTURE CARD

4096 colours at 1024 X 768
Capture time of less than one
second
Pal, NTSC, composite, s-video or
RGB
Free Photofinish software

12 BIT Version £162
24 BIT Version £179

MEDIA PRO PLUS FULL MOTION & SOUND CAPTURE CARD

Real time digitising
Pal, NTSC or s-video
2 Stereo Speakers
Headphones
Free Photofinish software

Standard Version £234
High Res Version £248



Multimedia Books

Guide to Multimedia £24
Master CD for Multimedia £34
Multimedia Erector Set £36
Multimedia Mania £42
Soundblaster Secrets £17

Books Include CD-Rom or Diskette

Speakers

Labtec

CS-150 with Power Boost £19
CS-180 with Monitor Brackets £19
CS-550 with 4w Power Boost £23
SS-700 with 3 band equalizer £26
CS-900 with 7 w Power Boost £52
CS-1000 Under Monitor Unit £62

Magic Media Economy £9
Screenbeat £19
Westpoint Pro £29
Zy-Fi £33
Zy-Fi Pro £49
Altec Pro £249

THE MAGIC MEDIA PROMISE

**WE WILL
BEAT ANY
ADVERTISED
PRICE!!**
SUBJECT TO STOCK

PC-TV-VIDEO OUTPUT MODULE £96

PC Output to video or television
Composite Pal, Scart

VGA Splitter Box £57

Connection of up to 3 VGA Monitors
Colour or Mono
D-15 Connector Lead

MULTIGEN GENLOCK ADAPTOR £274

Genlock overlay facility
RGB, S-Video and Composite output
S-Video and Composite input
640x480 Resolution
256,000 colours
Flicker reduction filter
PAL & NTSC compatible

INTEL PC VIDEO CAPTURE CARD £399

Composite & S-VHS input
One-step capture & compression
Super compression
On-board I-750 processor
Records 15 frames per second
Free Video for Windows, Compel,
MediaBlitz and Gatekeeper CD-Rom



Multimedia Accessories

SBlaster V2 Speaker Adaptor £14
Disk caddy £5
a.c. adaptor £9
Photo CD software £18
CD Case £9
Orchid SCSI upgrade £22
Soundblaster developers kit £48
Videoblaster developers kit £48
Midi adaptor kit £21
Video Titrer System £99
Video Director £129
Analogue 'Y' cable £9
Microphone £12
Headphones £8
Earphones £7
20m Headphone Extender £5

Joysticks

Gravis Analogue Pro £34
Gravis Gamepad £19
Gravis Clear £26
Westpoint Mach 2 £22
Westpoint Flightstick £31
Quickshot IBM £12
Winner 2000 Yoke £35
Konix Speedking £16
Suncom Edge £15
XT/AT Game Card £13

Mice

Logitech Serial £26
Logitech PS/2 £36
Magic Media Serial £10
Logitech Cordless £68
Logitech Trackman Portable £60
Mouse Mat £2.50

Lets Get CREATIVE

LOWEST PRICES EVER!



Sound BLASTER

All in one sound card
Speech/music/voice/midi
Game port
Lemmings & Indy 500 games
Free Speakers

£58.00



Sound BLASTER Pro

Fully featured stereo card
Speech/music/voice/midi
CD-Rom Interface
Lemmings & Indy 500 games
HSC Interactive
MPC Encyclopedia on CD
Free Speakers

£88.00



Sound BLASTER 16 ASP

Fully featured 16bit stereo
Speech/music/voice/midi
CD-Rom Interface
HSC Interactive
PC Animate & Voice Assist
Free Microphone

£165.00

£195.00 SCSI VERSION



Wave BLASTER

Add on board for SBP16
Wave-Sampled synthesis
196 preset sounds
MT32 emulation

£138.00



Video BLASTER

Software selectable source
NTSC & PAL
2 million colours @ 640 x 480
Live & still zooming & scaling
Audio mixing
D-15 connector lead
Free MS Video for Windows

£249.00



VideoSpigot™

For Windows

Sound and Motion capture
NTSC, PAL and SECAM
Real time YUV 4:2:2
capture/compression
Free MS Video for Windows
Cinepak CODEC

£224.00



Midi BLASTER

General MIDI module
MT32 Emulation
200 preset instruments
20 Polyphony
16 Channels
Free Cakewalk Apprentice

£189.00



CREATIVE TVCoder™

VGA to Video encoder
NTSC & PAL
Flicker filter for stability
Control Panel
Supports VGA/SVGA

£219.00



OmniCD CD-ROM KIT

Panasonic 563 drive
Twinspeed & Multisession
Interface Card
Free Aldus Photostylor

Internal £249.00

External £299.00



Sound BLASTER CD16

ASP

Soundblaster Pro 16 card
Panasonic 563 Drive
Twinspeed & Multispin
Speakers & Microphone
Bundled CD Software

£444.00



TECHNICAL SALES 081 - 343 9933

THERE'S MORE!



THE MULTIMEDIA SPECIALISTS

Multimedia Upgrade Kits

MAGIC MEDIA UPGRADE PACK

Creative 563 twinspeed drive
Soundblaster Pro card
Speakers & Microphone
Groliers Version 2.0 CD
Sherlock Holmes CD
World Atlas MPC CD

Internal £322
External £378

TOSHIBA 3401 MULTISESSION PACK

Toshiba 3401 Twinspeed drive
Orchid Pro card
Orchid SCSI Upgrade
Speakers & Microphone
Kodak Photo CD Software
Windowware '93 CD
7th Guest CD

Internal £485
External £582

MITSUMI LU005 MULTISESSION PACK

Mitsumi Multisession drive
Soundblaster Pro card
Speakers & Microphone
Loom CD
Animals MPC CD
Groliers Version 2.0 CD

Internal £296

PANASONIC 562B/S MULTISESSION PACK

Panasonic 562 drive
Soundblaster Pro card
Speakers & Microphone
7th Guest CD

Internal £288
External £334

Windows Accelerators

ORCHID FAHRENHEIT VA £164
1Mb Video RAM
1280x1024
16.8 Million Colours
72Hz Refresh Rates
Voice Annotation Hardware



ORCHID Prodesigner IIS £98

Hard Drives

All Hard Drives are Conner and come with complete fixing kits.

Conner 125Mb IDE £138
Conner 250Mb IDE £192
Conner 340Mb IDE £268
Conner 545Mb SCSI £486
Conner 1.37Gb SCSI £798

Maths Co-Processors

intensive applications:

80287-XL (12Mhz) £35
80387-16SX (16Mhz) £44
80387-20SX (26Mhz) £44
80387-25SX (25Mhz) £47
80387-33SX (33Mhz) £53
80387-16DX (16Mhz) £54
80387-20DX (20Mhz) £54
80387-25DX (25Mhz) £55
80387-33DX (33Mhz) £58
80387-40DX (40Mhz) £60

INTEL also available
Call for prices and specifications.

Operating Systems

Dr Dos 6/Novell Lite £39
OS/2 £89
Windows 3.1 Upgrade £39
Windows 3.1 Full £72
Windows NT £292
MS Dos V.6 £49

Scanners

Logitech Scanman 32 £89
Logitech Scanman 256 £194
Logitech Colour £319
Epson GT6500 £634
Epson GT8000 £1054

MICROSOFT® FLIGHT SIM VERSION 5 £24.00

CD-ROM Networking

CD-NET For DOS £337

10 User site licence
Novell, Microsoft, Banyan
Vines, DEC Pathworks,
Artisoft, 3Com and Startlan
compatibility.
Easy to follow front end.
Automatic location.
Windows compatible.

MAGIC MEDIA OFFERS A FREE CORPORATE FEASIBILITY STUDY FOR ALL YOUR MULTIMEDIA REQUIREMENTS
081-343 9933

MultiMedia Computers

New from Magic Media a complete range of Multimedia PCs :

ENTRY LEVEL £994

386SX 40
4Mb RAM
85Mb Hard Disk
Mitsumi Multisession Drive
Soundblaster Card
SVGA 14" Monitor

HIGHER GRADE £1374

486SX 25
4Mb RAM
170Mb Hard Disk
Panasonic 562 Drive
Soundblaster Pro Card
Local Bus VGA Card
Local Bus IDE Card
NI SVGA 14" Monitor

PROFESSIONAL £2687

486DX 50
8Mb Ram
240Mb Hard Disk
Toshiba 3401 Drive
16Bit Sound Card
2Mb Local Bus Cache
Wietek P9000 Accelerator
NI SVGA 17" Monitor

All PCs come configured with Windows 3.1 and MSDOS 6

CHOOSE ANY 5 OF THE FOLLOWING CD TITLES FREE WITH ANY PC

World Atlas MPC
Sherlock Holmes
Loom
Sound Sensations
MPC Wizard
Windowware '93
Futura
Kodak Photo Access
Colossus Cookbook
Clipart Goliath
Hot Suff II
Animal MPC

TECHNICAL SALES LINE

081-343 9933

COREL DRAW!

VERSION 4 £256
including CorelMOVE

UPGRADE £168
Upgrade any version of CorelDRAW
First page of manual, Disk 1 or the
CD-ROM as proof of ownership

COREL ARTSHOW 3 £25
Over 3000 designs included

Components

2 port serial card £11
Super IDE card £19
Multi I/O card £16
Parallel Card £11
Cherry 102 Keyboard £29
2 Way Parallel switch £26
Printer cable £3
Mouse Mat £22.50

1Mb x 9 SIMM £34
4Mb x 9 SIMM £123

**MAGIC MEDIA SUPPLY
PARAGON MEMORY WITH
A LIFETIME WARRANTY
CALL TECHNICAL SALES
FOR CURRENT PRICING**

MAGIC MUSIC

Roland Boards

Roland SCC1 £355
Roland SCC7 £247
External GM Sound Module
RAP-10 Card £381
2 Channel H/Disk Recording

MIDI Keyboards

Roland PC-150 £121
49-Key GM/GS Compatible
DTMS Keyboard, Mains or
Battery Powered

Roland PC200GS £179
49-Key GM/GS Compatible
DTMS Keyboard, Battery
Powered.

Music Software

MaxPak V.2 (Win) £152
Band in a Box £69
Powertracks Pro £69
Win/DOS 48 Track MIDI Sequence

The Pianist £38
The Jazz Guitarist £38
More in series to follow

Musicator (Win) £199
Musictime £195
Digital Soup £78
Cakewalk £CALL
Cakewalk Pro (Win) £CALL
Cubase £CALL
Cubase Lite/Score £CALL
Super Jam £57

Music Kits

Roland DTM7AT £313
SC7 Module
Ballade and Band-in-a-Box

Roland DTM7WAT £322
SC7 Module
Turbo Trax and Band-in-a-Box

Roland DTM100AT £419
SCC1 Card
Ballade and Band-in-a-Box

CREATIVE MIDI £163
SoundBlaster Pro Card
Midi Kit
Powertracks
Speakers

Music Accessories

15W Monitor Amp £99
2x7W Stereo Amps £138
SC7 25 pin Cable £16
SC7 9 pin Cable £13
SoundBlaster MIDI £21
CS10 Stereo Monitor £88
Sound Check CD £24

MUSIC SPECIALIST AVAILABLE CALL 081-343 9933

Music Books

MIDI Ins, Outs, Thrus £10
MIDI Survival Guide £7
MIDI Home Studio £10
The Complete Blaster £11
Jargon Buster £12
Advanced MIDI Guide £10
Practical MIDI £7
Home Recording £13
Computers & Music £9
PC Music Handbook £9
Music in Sequence £13
Complete Cubase £32

Beatles Classics £10
Classic Ballads £10
Pop & Rock Hits £10
These books include 3.5" Disks
packed with Original GMGS MIDI
Files and Songbooks

CD ROM TITLES



ENTERTAINMENT

7TH GUEST	£39
B17 SILENT SERVICE	£29
BATTLECHESS MPC	£22
BLUE FORCE	£29
CARMEN SANDIEGO	£28
CHESSMASTER	£22
CHESSMANIAC	£29
CONAN	£25
CYBERGENIC	£28
DUNE	£36
ERIC THE UNREADY	£29
EYE OF BEHOLDER	£34
F15 STRIKE EAGLE	£39
FUTURE WARS	£29
GUY SPY	£22
HACKER CHRONS	£18
INDIANA JONES IV	£33
JUTLAND	£33
JONES IN FAST LANE	£25
KINGS QUEST V I	£35
KYRANDIA	£34
LAURA BOW II	£29
LOOM	£22
LUCAS PACK	£29
MAD DOG MCREE	£29
MANIAC MANSION 2	£34
MONKEY ISLAND	£35
MICROCOSM	£38
RETURN PHANTOM	£34
PHYSICO KILLER	£29
SAM RUPERT	£24
SCRABBLE	£29
SECRET WEAPONS	£24
SHERLOCK I	£22
SHERLOCK II	£35
SHERLOCK III	£38
SPACE ADVENTURE	£39
SPACE QUEST IV£22	
STELLAR 7	£22
TERROR OF DEEP	£29
VIDEO CUBE	£39
WACKY FUNSTERS	£18
WILLY BEAMISH	£25

MUSIC

COMPOSER QUEST	£19
GROOVES	£82
JAZZ	£44
MS BEETHOVEN	£36
MS MOZART	£36
MS STRAVINSKY	£36
MS INSTRUMENTS	£36
EA MOZART	£24
SOUND WAVE	£14

EDUCATION

ADVANCED LEARN	£28
AMANDA STORIES	£34
ANIMALS MPC	£29
ARTHUR TEACHES	£29
BERLITZ	£88
CREAPY CRAWLIES	£38
CREATIVE KIDS	£28
DINOSAUR ADV	£28
ELECTRICITY	£35
LIBRARY OF FUTURE	£99
MAMMALS	£79
MAVIS BEACON	£24
OCEAN LIFE	£22
PUTT PUTT	£29
SPULLBOUND	£34

REFERENCE

AMERICAN HERIT.	£48
ANIMAL ENCY	£39
COMPTONS ENCY	£190
DICTIONARIES	£14
DINOSAURS ENCY	£42
GUINNESS RECORDS	£34
HUTCHINSONS	£98
MS ENCARTA	£194
MS BOOKSHELF	£49
MULTIMEDIA ENCY	£219
MCMILLAN DICT	£28
SOUND ENCY	£14

LANGUAGES

BERLITZ FRENCH	£88
BERLITZ GERMAN	£88
BERLITZ ITALIAN	£88
BERLITZ SPANISH	£88
LANGUAGE PACK	£14
LYRIC FRENCH	£33
LYRIC SPANISH	£33
LEARN SPANISH	£49
LEARN FRENCH	£49

LITERATURE

BIBLE AND RELIGION	£14
COMPLETE DICKENS	£26
COMPLETE TWIN	£26

GEOGRAPHY

GREAT CITIES I	£30
GREAT CITIES II	£30
GREAT CITIES III	£38
LONDON	£29
MAJESTIC PLACES	£24
US ATLAS	£35
WORLD ATLAS MPC	£29
WORLD FACTBOOK	£14
WORLD TRAVELLER	£16
WORLD VIEW	£24
WORLD VISTA	£39

SCIENCE

AMAZING UNIVERSE	£39
CREEPY CRAWLIES	£38
LIVING WORLD	£79
OCEAN LIFE I	£22
OCEAN LIFE II	£22
DEEP VOYAGE	£22
DINOSAURS	£42
ELECTRICITY	£35
FAMILY DOCTOR	£19
SPACE HISTORY	£24
SPACE ADVENTURE	£29

ART & DTP

BUSINESS BGND	£24
CLIPART GOLIATH	£12
DREAM GALLERY	£49
FONT FUN	£24
FONTMASTER	£22
ISLAND DESIGNS	£24
SLAND GIRLS	£19
JETS AND PROPS	£24
LIBRARY CLIPART	£29
LOCAL GIRLS	£19
MONEY, MONEY	£24
MANY TYPEFONTS	£14
PUBLISH IT!	£68
FONT PRO	£49
PHOT PRO	£69
RENAISSANCE I	£34
RENAISSANCE II	£34
WILD PLACES	£24

SHAREWARE

BIBLES & RELIGION	£12
CLIP ART	£12
COLOSSAL COOK	£12
DEATHSTAR ARCADE	£10
FUTURA	£13
GAMES MASTER	£15
GAME PACK I	£18
GIF IT	£10
HAM RADIO	£13
JUST GAMES	£14
MEGA CD	£15
SELECTWARE	£10
SOUND LIBRARY	£14
SOUND SENSATIONS	£10
SHAREWARE EXTRA	£49
SHAREWARE OVER	£10
SUPER CD	£10
SIMTEL	£19
TECHNO TOOLS	£12
TOP 2000	£12
VGA SPECTRUM	£19
WINDOWS '93	£10
WIZPACK	£19



TECHNICAL SALES LINE

081-343 9933

MICROSOFT® MULTIMEDIA CD TITLES

ENCARTA £194

29 volumes
Over 1000 articles

DINOSAURS £37

Over 1000 illustrations
Exciting video clips

CINEMANIA £36

745 films
3000 biographies
1000 stills
Sound clips

GOLF £36

Advanced video
Customised sound
Swing demonstration

STRAVINSKY £36

MOZART £36

BEETHOVEN £36

Over 200 instruments
Sound samples
Orchestral performances

WINDOWS™ NT £292

The ultimate Operating System

CALL 081-343 9933 IF THE TITLE YOU REQUIRE IS NOT LISTED HERE

WHY MAGIC MEDIA ?

•BUY WITH CONFIDENCE•
RELIABLE LEADING BRAND
PRODUCTS TO GUARANTEE
QUALITY AND LONG TERM
SUPPORT

•EXPERIENCED STAFF•
FOR FRIENDLY ADVICE ON
ALL YOUR MULTIMEDIA
REQUIREMENTS

•FREE TECHNICAL
SUPPORT•
FULLY TRAINED TECHNICAL
DEPARTMENT TO ASSIST YOU
WITH YOUR QUERIES

•FAST RELIABLE
SERVICE•
GOODS DELIVERED DOOR-TO-
DOOR WITH 24 HOURS

Delivery Charges:

UK Mainland next working day
Europe 5 day service

£5.00 + V.A.T
£7.00 + V.A.T

FREE DELIVERY

ON ORDERS OVER £150.00 + V.A.T.

(U.K. Mainland Only)

Order Direct To: **Magic Media, Brent House, 24-26 Friern Park,
North Finchley, London N12 9DA**

DESCRIPTION	QTY	PRICE
_____	_____	£ _____
_____	_____	£ _____
_____	_____	£ _____
Add P&P + VAT at 17.5%		£ _____
TOTAL		£ _____

I enclose a cheque for £ _____ made payable
to Magic Media or Please debit my Mastercard/Visa

Number _____ Expires _____
Name _____ Company _____
Address _____
Postcode _____
Telephone No _____ Fax No _____

FREE

DISCOUNT CARD

ISSUED WITH YOUR
FIRST PURCHASE

THIS ENTITLES THE
HOLDER TO DISCOUNTS ON
ALL PRODUCTS AND A
QUARTERLY MULTIMEDIA
UPDATE MAGAZINE

ASK FOR FURTHER DETAILS

081 343 9933

Prices & products are subject to change &
availability. All trademarks & trade names
are the property of their respective
manufacturers & owners.

All prices exclude VAT

10% restocking fee for returned
non-defective goods



Title	Dark Sun: Shattered Lands
Publisher	SSI/US Gold
Contact	(021) 625 3366
Price	\$45.99

Dark Sun: Shattered Lands

In SSI's latest role-playing spectacular, you must escape the gladiatorial arena. But, more importantly, can this game escape cliché city?

Eek! I'm being attacked by huge mutant porcupines. Is that Chernobyl I can see on the horizon?

The inventory screen in all its glory. The insectoid thingy is me, by the way. Watch out for those mandibles, boys!

SSI, holder of the official AD&D licence, has achieved considerable success with its role-playing games, notably the Gold Box and Eye of the Beholder series. However, all games begin to look dated after a while, and so a new game engine has been developed. The first game to appear is Dark Sun, which not only uses the new engine but is also set in a different game world. Dark Sun takes place on Athas, a once fertile planet which has been laid waste by injudicious use of magic. In the past, powerful wizards discovered a way of drawing energy from the sun, but after thousands of years the sun became unstable and the seas evaporated. The harsh conditions resulted in an even harsher society, dominated by draconian city states. A large proportion of the population was enslaved, and any fit



and healthy individuals were forced to fight in the arena as gladiators. A few isolated villages gave sanctuary to escaped slaves, but with water shortages and the constant threat of being attacked by vicious monsters and bands of slavers, life became extremely tough.

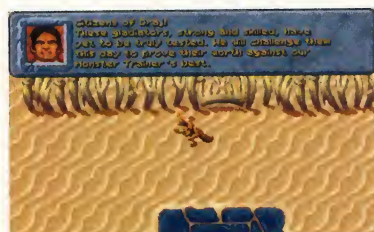
Dark Sun contains mercifully fewer clichés than other RPGs. Athas has its share of elves, halflings and dwarves, but they tend to be bigger and tougher than those found in the majority of fantasy games. For a start, the dwarves don't have beards: they're all bald and hairless, and — shock — some of them are even female. The rest of the Athasian popula-

To say that Athas is a harsh world is putting it mildly. One minute you're fighting for your life in the desert, the next you've been bundled away to fight for your life in the arena. Doesn't look like you can win, does it?

tion is less familiar. You won't find any orcs or goblins here (hurrah!), since most of the desert life-forms are insectoid in appearance. When picking characters for your party, you can choose from the usual humans, elves, halflings and dwarves, but there are also thri-kreen (giant mantis-like creatures), half giants or muls (tough human/dwarf hybrids which have the height of a human along with the strength and constitution of a dwarf).

At the start of the game, your characters have been enslaved and are forced to fight in the arena at Draj, one of the main Athasian towns. Your first objective is to escape. To begin with, you may fight as

Two Minutes of holidays in the sun



You start the game by being unceremoniously chucked in at the deep end, ie, the arena. It's as simple as kill or be killed. The first few fights aren't too testing, and if you lose any characters at this stage, I'd advise starting again.



This nasty selection of monsters are your first opponents. Get your weaker characters to stand well back and pepper them with arrows while the fighter types move in close and smack 'em over the head with clubs. Search the corpses for additional weapons.



After you've won the fight (a doddle), collected the money thrown to you by the grateful audience and ignored the announcer's sarcastic remarks (you can make him eat his words later in the game), it's time to go back to the slave pens and get some kip.



After a few fights, you're thoroughly bored with the whole affair, and decide to escape down this handy manhole into the sewers. Don't try it until you've gained some experience in the arena, because the guards will duff you up good and proper.

many times as you wish, which enables you to build up experience points before venturing out into the desert. However, since most of the experience points are gained by completing quests rather than fighting monsters, I don't advise going out of your way to kill things until your characters have advanced somewhat.

Dark Sun has a fairly straightforward plot, but the game itself is non-linear. Once you've escaped from the arena, you have the freedom to go and explore. You'll be given a few clues as to what you ought to be doing next, but you're by no means limited to performing a set task at a certain time. If you were to get stuck, for instance, it's possible to go off and do something completely different before

returning to the problem. Having said that, I didn't come up against anything which had me stumped for any length of time, and even if you do make a mistake, it's nearly always possible to fight your way round a situation.

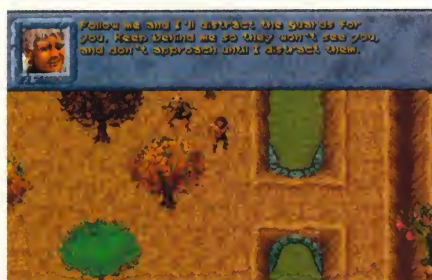
The nice thing about Dark Sun is that you don't have to be an AD&D addict to be able to get into it. If you want to spend three hours rolling up a party of incredibly well balanced characters, you can, but if you'd rather not, there's a pre-generated party readily available. If you want to handle the combat yourself, that's fine too, but you also have the option to let the computer control your characters during a fight. Basically, you can get as involved in the game as you wish: a detailed knowledge of the Athasian flora and fauna isn't mandatory. All you need to know is that if it's bigger than you, kill it; if it's the same size, talk to it first – and then kill it anyway.

The graphics are nothing special, but they are, at least, clear and colourful. Dark Sun is much easier on the eye than the Gold Box games and, whilst it isn't as pretty as Origin's Ultima VII and Serpent

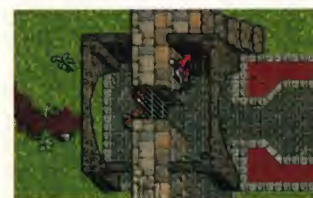


Isle, the scrolling is faster and less jerky. The sprites are fairly small and the animation isn't exactly realistic, but it isn't awful either. If you have a slower machine, you have the option to turn the animations off altogether, and although characters look a bit strange gliding

If you thought it was hot in the desert, try walking across red-hot lava flows in your bare feet. It's enough to make a fakir wince.

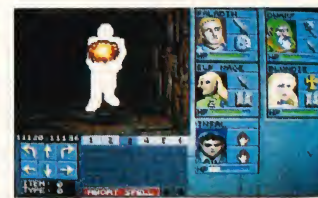


Alternatively...



Serpent Isle
Origin, £44.99
Rated 7, Issue 20

The second Ultima VII game is awesomely huge, both in terms of disk space used and playing time. It's wonderfully atmospheric, with an involving plot, attractive graphics and a decent soundtrack, but it's also quite tough and could prove daunting to novices. The only problems are jerky scrolling and slow disk accessing, but if you've got a fast PC it's well worth getting.



Eye of the Beholder II
SSI/US Gold, £34.99
Rated 7, Issue 4

Even bigger and better than the original, this game has all the puzzles, monsters and atmosphere that you could ever want in a role-playing game. It's based on AD&D rules, but you don't have to be familiar with them beforehand in order to play it. Although it isn't as sophisticated as Origin's Underworld series, it's still hugely playable and extremely entertaining.



REVIEWS

Right: Select the spells you wish to cast from this screen, and then place the cursor over the monster you want to attack.

Below: Aha! A camp. Clicking on the campfire with the "look" icon enables you to rest your party.

Bottom: Things come big in the desert, including the caravans. Just what kind of creatures grow big enough to pull this baby? No, no, I don't want to find out, after all.

around, it does speed things up somewhat. In default mode, only one member of the party is visible whilst travelling around, but all four characters appear as soon as you become involved in a fight. Owners of faster PCs can change this so that the whole party is on screen at all times, but it doesn't serve any real purpose other than to add a little extra realism to the game.

Combat is turn-based rather than real-time. This is quite handy if you suddenly feel the need to, erm, powder your nose in the middle of a fight (some of those monsters are pretty scary, right?) because your computer is happy to sit and wait for your next command. This may not be the most exciting way of conducting a battle, but at least you won't end up getting wiped out because you dropped coffee in your lap at a crucial moment and had to go and change your trousers.

Spell casting is also easy to get to grips with. In the Eye of the Beholder games, you had to prepare your spells each time you made camp. This system was not terribly satisfactory because often enough, the spells you'd painstakingly prepared proved about as much use as a plimsoll line on a hovercraft. In Dark Sun, every spell you learn is always available providing you have enough magic points to cast it. Another difference between this and other RPGs is that all characters can cast spells. Mages, or preservers, as they're known on Athas, have their own special brand of magic, as do clerics, but all



Athasians possess psionic powers (telepathy, telekinesis, and so on) which can be used to harm or heal during combat.

The interface is one of the best I've seen in an RPG. Dark Sun is designed to be played using the mouse, and although there are some hot keys included, you can't play the game using the keyboard alone. The mouse is used to control the three main actions: walking, fighting and examining objects. Clicking on the right mouse button cycles through these actions, whilst clicking on the left button implements them. Looking at a door, for example, will also enable you to open it unless it is locked. Looking at one of your party members brings up the inventory screen, and looking at another character enables you to talk to him.

Other options can be brought up by clicking on the Dark Sun icon at the top left of the screen. From here, you can cast spells, check character health, examine inventories or even access the overhead map. Needless to say, the map is extremely useful. It shows each level or area in its entirety rather than just the parts you have explored (despite what it says in the manual), and monsters and non-player characters show up as red dots. By clicking on part of the map, you zoom in on that area, so you can see if a dot represents a large beastie with tentacles and razor sharp teeth, or a friendly humanoid.

I only have one major complaint, and that is the amount of time it takes to load and save games. Let's just say that the process wasn't exactly instantaneous. Bringing up the inventory screen also takes more than a few seconds, which didn't seem very satisfactory to me. Installing Smartdrv improves matters slightly, but not as much as I'd hoped. Obviously, the faster your hard drive, the less of a problem you'll have.

In all, Dark Sun is a good product. It isn't outstanding by any means, but it's well-presented and the gameplay was good enough to keep me quiet for a few days. The new game engine wasn't as revolutionary as I'd hoped, but it's a whole lot better than the Gold Box game engine and the interface seems to have been well thought out. If you're looking for something to impress your friends with, I'm not sure that this is the game for you, but if you're after a bit of solid entertainment, Dark Sun won't disappoint you.

■ Cal Jones



Techspec

You need a 386SX with 2Mb RAM minimum, but a

386DX with 4Mb RAM is recommended. DOS 5 minimum, and a Microsoft compatible mouse is required. Smartdrv will improve performance. The ProAudio Spectrum soundcard is also supported.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	17Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	x	Keyboard	x	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	40MHz
Minimum memory	2Mb
Free RAM required	580K

Verdict

Entertaining, if not breath-taking

rating

7

FROM GRAFTGOLD THE PROGRAMMERS WHO GAVE YOU RAINBOW ISLANDS...

FIRE & ICE

THE DARING ADVENTURES OF COOL COYOTE



NOW
AVAILABLE
ON
PC



AMIGA VERSION SHOWN

- With all the levels, power-ups, bonuses, features, hidden secrets and multiples that you'd expect from award-winning Graftgold •

"BEAUTIFUL AND EVOCATIVE...STANDS UP PROUD AMONGST THE BEST OF PLATFORM GAMES." Amiga Power

"THE BEST PLATFORMER SINCE RAINBOW ISLANDS." The One 92%

"A MUST BUY." 90% CU Amiga Screenstar



GRAFTGOLD
Creative Software

C1, Metropolitan Wharf, Wapping Wall, London E1 9SS. 1992 Graftgold Creative Software. Published by Renegade.



Title	SimFarm
Publisher	Maxis/Mindscape
Contact	(0444) 246333
Price	£34.99

This farm, deep in the heart of Texas, may be unambitious, with eight healthy cattle, and a couple of fields of corn, but it is beginning to recoup its initial investment.



That wriggly worm in the corner of the field means I've got a problem with pests. Time to spray the lot with pesticide, and to hell with the environmental consequences.

SimFarm

Now you can retire to the country with your proceeds from running Sim City and set up a market garden, or become a rancher, in Maxis's latest occupational strategy game, SimFarm

SimFarm is the rural component of what publisher Maxis hopes will eventually be a complete Sim-world, in which you will be able from your Simmed City to zoom in by so many levels that you play Sim House, then Sim Room, and so on. Presumably, SimFarm is where you scroll out to past the outskirts of your city.

In SimFarm you must manage up to 24 different crops and four different types of livestock, making sure the crops don't succumb to pests, rot, weeds or drought, and that the animals stay well-fed and watered. In time, you should be able to expand your farm, and become wealthy.

To begin the game, you either choose to place your smallholding in a region of the

United States, or design your own environment. With your farm placed just out of town and \$40,000 in the bank, it's time to buy a silo to store your crops, tractor, plough and harvester and start sowing that seed. Of the 24 crops, 16 are available at any one time in the game for purchase. You buy the seed, select an area to act as the field and watch the program go through the manoeuvres of ploughing and planting. The crop gradually turns green as it matures and various symbols overlaid on the field warn you if there's too much or too little water (irrigation and drainage will cure this), too few soil nutrients (spray with fertiliser), or pests, weeds, or disease. The manual and on-screen help go into some detail about the conditions preferred by, say, gladioli over soya beans, so that you shouldn't have much difficulty choosing what to grow.

After harvest, you can store the crop in your silo, sell it immediately, or sell it on the futures market: if the market price is currently high, guarantee to harvest so much top-notch barley, for example, and sell it when ready at the current price. Whichever way, you need to keep that



The buying screen deals with machinery, outbuildings, livestock and crops. Here's where you can build up your livestock. Once you've bought four or five, hopefully they will breed to produce more stock for the farm.

Two Minutes of pure corn



If you don't want the hassle of manually spraying the fields, you can set the program to carry this out at regular intervals automatically. Here you can also check the progress of your crop.



At harvest time, your combine harvester comes out to gather up the crop. The harvest is then stored in the silo until you decide to sell it, either immediately, or you can wait to see if the price goes up.



And yes, despite all the dire warnings while the crop was growing, I can sell this corn for just over \$1,000. I'll take the money and concentrate on raising the next batch.



\$40,000 topped up, since buying seed, planting, spraying and harvesting all costs money. You could spend all your playing time reacting to on-screen problems as they pop up, or you can set schedules to get the program to do it all for you, so that using the separate scheduling window, the crop is fertilised, de-pested and weeded at regular intervals. However, toxic damage to fields is also taken into

Having bought your buildings, such as this barn, place it somewhere by clicking on the desired site. Cattle will be more healthy — and thus more valuable — if they have a barn to shelter in.

account by the program, so you need to balance keeping the crop healthy with letting fields lie fallow occasionally.

You can then turn your attention, finances permitting, to expanding the farm by buying adjacent land, and raising livestock — either horses, cattle, pigs or sheep. With proper care, they will breed and can be sold for a tidy profit.

The research and attention to detail in SimFarm — though more on the crops than the livestock side of things — is admirable, but I found the budgetary restrictions got in the way of playing and experimenting with the game too often. Frankly, I don't enjoy being told all the time that I don't have enough money for a water tower, or more land, or that my taxes are due to be paid in three months time — it's too much like real life.

This is a personal view, but it detracted from the interesting part: growing things and seeing what happened, and how far you could tamper with nature (disasters such as a plague of locusts, floods or tornadoes are available, should you wish to

wipe out your farm completely). Having to ensure that I'm not sending the market value of my combine harvester plummeting by using it to gather sub-standard crops just isn't very exciting.

SimCity and A-Train both succeeded because there was a large element of fun — and you got a nice warm glow from setting up the environmental conditions and then watching the communities grow. SimFarm both seem to err too much on the heavy side — more educational tool, perhaps, than game.

■ Christina Erskine

Techspec

The publisher's minimum spec is a 12MHz 286 with

640K RAM. Don't even think about it — it runs, but unresponsively and with constant hard disk access. I'd recommended a 386 and more importantly 1Mb or more of RAM.

Disk requirements

High density	x
Hard disk only	✓
Space taken on hard disk	4.3Mb

Graphic modes

CGA	x	EGA	✓	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	x	Keyboard	x	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz 386
Minimum memory	640K
Free RAM required	520K

Verdict

One mainly for the agricultural economists' lobby

rating
5



Sim City 2000

Maxis/Mindscape, £TBA

Although not due out until after Christmas, the new-look SimCity 2000 looks promising. New features include mass riots by the sims, an alien spaceship on the disaster list, the option to build a subway system to ease traffic congestion and the ability to raise and lower terrain.



SimLife

Maxis/Mindscape, £39.99

Rated 6, Issue 17

Very similar to SimFarm in looks, the object here is to create the right environment for organisms to evolve and flourish in an eco-system. It has a complex model which, like SimFarm, leans more towards the educational than entertaining.

Alternatively



Title	Patriot
Publisher	Three-Sixty Pacific/EA
Contact	(0753) 549442
Price	£44.99

Patriot puts you right in the military hot seat, with a wealth of tactical information to hand. But finding the actual game underneath all this can be a tough job ...

Patriot

Patriot is a military simulation of the Gulf War. I hesitate to call it a 'war game'. It is one, but it's unlike any other I've ever played, and to describe it as a 'game' of any kind seems rather inappropriate, if not flippant: it's thoroughly serious, massively detailed and very difficult. It is probably the most accurate commercial military simulation yet devised, and if you are an aspiring staff officer anxious to test your command theories on a hypothetical model, this is the product for you. If, on the other hand, you are a games player, I have my doubts.

Only two years on from Desert Storm, we're inundated with Gulf War games.

What is the attraction of simulating the most one-sided conflict of modern times?

The concept behind Patriot is radical. The designers have tried to shed the baggage of the board game ethos and start from scratch with a view to tapping the massive potential of the PC. As with all Three Sixty Pacific products, the documentation and presentation are first class,

with high standard SVGA graphics. War games must be fought on maps, but there is no hex grid. Units are represented on the map by symbols, but the actual space they occupy is not defined by hexes or squares. As commander, you set physical boundaries on scale maps within which units can deploy, using the mouse to drag over and redraw their spheres of operation. This is fiddly and hard to master. The enemy appears on the map in the same manner, but, unlike in the traditional war game, you cannot move to an adjacent 'square' and then attack, because adjacency is no longer a workable concept, and anyway the game functions at a higher level. You're not concerned with the usual calculations of abstract combat 'factors', or with moving units physically through a constant grid; rather, you are occupied exclusively with command decisions. These involve defining the inter-relationships of units under your command (who is in the front line, who is in reserve; who gets what artillery/ air support and priority supply), determining the 'posture' of your troops (if a unit is attacking it behaves more aggressively than if it is defending), and selecting the unit boundaries, objectives



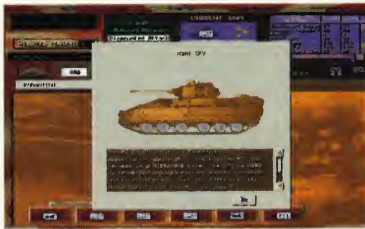
Two Minutes of sand blasting



The map shows the whole theatre of war and in the bigger scenarios, it will shortly be covered by a maze of unit boundaries. My first job is to assign air support to my units.



This is the organisational chart, detailing the command structure of my units. It's up to me to choose their formations (frontline, reserve, etc) and match them to the correct posture.



It's vitally important to know the strengths and weaknesses of your troops. Click on any unit and full details of its equipment and effectiveness will automatically appear.



Meanwhile back at the battle: the map on the right continues to give the large picture, while on the left I'm focused on the core operations. So far it appears to be plain sailing.



and paths of advance. You're not going to get technicolor explosions every time an enemy tank explodes. If you did, you'd be too busy to notice.

To quote the designers, this is "an ambitious simulation of a complex reality". You can say that again. An experienced keyboard strategist, I have to confess I found Patriot sticky and sometimes baffling. I hesitate to criticise, because the amount of work that has gone into its development is so enormous that I'm impressed to the point of being

In Patriot it's sand, sand everywhere. As it comes in any colour so long as it's yellow it can get very confusing.

awed. At one level, this game system is original and ought to signify a potential quantum leap out of the war games ghetto. Unfortunately, it doesn't quite deliver. I suspect that it might be too radical, and that the baby may have been thrown out with the bath water.

For me, there are two fundamental things missing. The first is a sense of challenge. Yes, Patriot is challenging, but the satisfaction lies in accurately performing procedures, not in winning the game. The Gulf War was so one-sided, and this reproduction is so faithful, that there's never any question of who's going to win. For this reason, no two-player option is provided because, as the designers rightly point out, who is going to want to play the Iraqis? The aim of the game is to secure your objectives while sustaining minimum casualties. This is very laudable, but it's not very exciting, and that is my second major criticism.

Playing Patriot just isn't enjoyable enough for me, and I think it's been a victim of its own high standards of detail. Much as I admire the skill of the

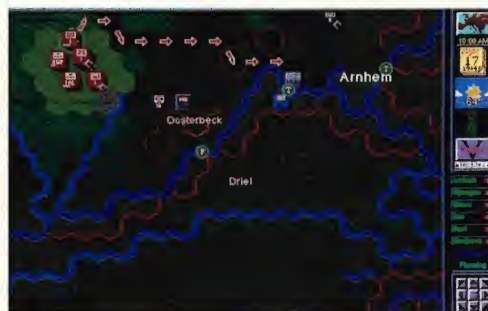
programming, it didn't get its hooks into me the way a top class strategy game should. It succeeds brilliantly in its own terms, but mere playability wasn't included in the brief, and I found myself yearning for something simpler, even at the expense of accuracy. Modern warfare is an involved and immensely complex business, and Patriot reproduces this all too perfectly. The job of a commander would seem to be 10 parts drudgery to one part glamour, and only a fanatical militarist would have it any other way. But as a fanatical games player, I could do with those ratios being reversed.

■ Simon Shaw



Harpoon
EA, £39.99

Patriot is touted as a land-based equivalent of Harpoon (even the packaging has been copied) and both games demonstrate the same massive attention to detail. The naval game, however, is infinitely more playable and better balanced on the whole. Harpoon 2 was demoed recently at ECTS and looks very impressive indeed. Watch this space.



V for Victory series

Three Sixty Pacific, V for V 1 and 2 £34.99 each, V for V 3 £44.99, V for V 4 £39.99

This series shows all the evidence of the board game influence from which Patriot tries to distance itself. The games are hex-based and complex, absorbing and challenging. For my money, these remain the best war games on the market. The fourth in the series, Gold Juno Sword, is reviewed this issue on page 115.

Techspec

Unfortunately, though not at all surprisingly,

Patriot is somewhat processor-intensive. It will run on a 386SX, but a 486 is recommended, particularly for the bigger scenarios, of course.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	5Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	x	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	x	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	x	Keyboard	x	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	595K
Free RAM required	4Mb

Verdict

Ambitious and original, but seriously flawed

rating

5

Alternatively...



Title	The Blue and the Gray
Publisher	Impressions
Contact	(071) 351 2133
Price	£39.99



The Blue and the Gray

The Blue and the Gray is a large-scale, ambitious war game set in the American Civil War. It's impressively detailed, attractively presented and well documented, undoubtedly the best thing of its kind Impressions has produced to date. However, it still has a number of maddening features which conspire to deaden its impact.

The root cause is one common to many strategy games: more, in this context, simply does not mean better. The designers have thrown in everything except the kitchen sink, but they've failed to come up with a coherent answer to the most crucial question – at which level are they attempting to simulate the war?

What they've produced is a game fought out in two completely different and non-complementary environments.

The first is strategic, where divisions are moved over a tiny square grid on a large-scale campaign map of the entire United States; the second is tactical, where the basic unit of manoeuvre is small groups of men, and the map is of the isometric variety. These two kinds of games have nothing whatsoever in common. The strategic one is much more interesting.

The problem with the tactical game is that it uses Impressions' hoary old Micro Miniatures system, first seen in Rorke's Drift and more latterly refined in Cohort II. Fortunately, this newest incarnation has shed much of the habitual twoness, but I can't help feeling that there must be something fundamentally wrong with a portmanteau system which can be applied to any tactical situation from 200BC to the 19th century inclusive.

Although the American Civil War is one of the most popular war gaming periods, there are surprisingly few computer simulations. Can Impressions fill the void?

Right: The Blue and the Gray is certainly comprehensive, with a full database to keep you informed as historical events unfold.

Top right: As well as fighting ad hoc engagements, you can recreate the battle of Bull Run on the tactical map.

The controls are clumsy and handling the battles is an unwieldy and unsatisfactory business. Though superficially similar to Fields of Glory, MicroProse's Napoleonic game is both more straightforward and more sophisticated: simply put, it's better designed.

If only the tactical game in the Blue and the Gray had been pitched at the Brigade level, where FOG operates. Then the unit of manoeuvre on the large-scale map would have been the corps, which makes excellent sense, and not the division, which makes no sense at all.

It might be argued that this is an unfair, over-detailed criticism, as the Impressions house style is more geared to fun than realistic war games. However, claims of authenticity litter the packaging and there's no doubt that the designers have attempted something new and altogether more complex. They've only partially succeeded, but there are enough glimpses of quality to suggest the potential for a very good game indeed.

It is possible to play at the strategic level only and to have the tactical battles resolved automatically, but in this case the results generated by the computer are somewhat too wacky for comfort.

If, though, the American Civil War is your period, then this may be the only

Techspec

You really need a 20MHz 386SX at least for any multimedia games: and a sound card and CD-ROM drive to play this game.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	4Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

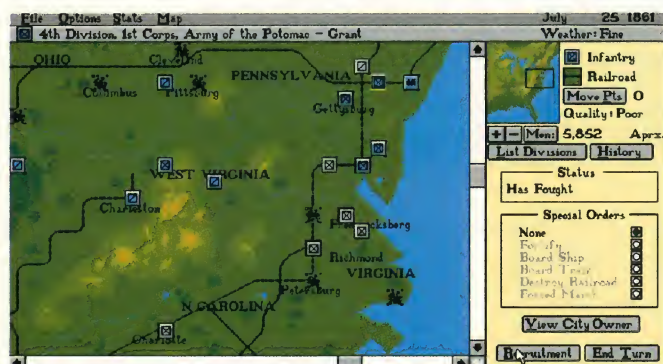
Joystick	x	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	25MHz
Minimum memory	550K

Verdict
Not quite on target

rating **6**



This is the campaign map, where you plan and execute your strategy. It's important to fortify and defend key cities and to control vital rail and river communications.

game in town. Alas, both Sid Meier and Three-Sixty Pacific seem to have put their ACW projects on the back burner.

■ Simon Shaw

BURN BABY BURN



III IT'S FAST,
 III IT'S DANGEROUS...
 III IT'S ILLEGAL!

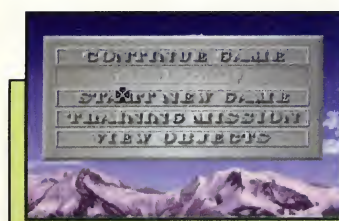
It's the ultimate road race. It thunders through six European territories and bullets across the U.S.A. It's not just a head-to-head between happy snappin', joy riding, boy racers... this is seriously hot competition against the meanest drivers on the tarmac. Beef up your hatch-back to enhance the speed and handling, plan your route and burn off the bizzies. So fire up your engine and pump up the gas for some fearsomely dangerous road racing. BURNING RUBBER... the sweet smell of victory.

IBM PC & COMPATIBLES

C B M A M I G A

AMIGA A1200

OCEAN SOFTWARE LIMITED • 2 CASTLE STREET • CASTLEFIELD • MANCHESTER
M3 4LZ • ENGLAND • TEL: 061 832 6633 • FAX: 061 834 0650



Title Strike Commander: Tactical Operations
Publisher Origin
Contact (0753) 549442
Price £19.99

Here's an innovation ... rather than simply having a wing man (or woman) thrust upon you, you can choose your own. This, presumably, is one of the privileges of being in command.



Strike Commander: Tactical Operations

Your new steed – the F-22 Lightning II. Purely an air interceptor, the F-22 isn't burdened by any heavy ground assault weaponry. In fact, it wasn't burdened by anything at all for very long under my expert guidance, as I regularly wiped it out during my first mission. Still, at least this stopped Miguel complaining about the scarcity of spare parts.

When Strike Commander first arrived in PC Review's office about six months ago, I approached the task of reviewing it with some trepidation.

After all, having topped the hype charts for almost two years during its gestation period, this is one program which eventually arrived at its destination hard disk with an excess of anticipation attached.

For once, though, most of the pre-release hyperbole was justified, with Strike Commander weighing in as one of the most entertaining and durable releases of 1993.

Now comes the inevitable 'data disk', an 11 megabyte collection which allows the user to rejoin his or her old squadron

(using all of the character stats built up in the original game if so required) to take part in up to 21 new missions.

In addition, there's a new plane to master (the F-22), new enemies to conquer (F-117s, F-4s and B-1s) and some new technical polish, including dual joystick and general MIDI support.

Tactical Operations takes up where Strike Commander left off – only six months in the future. This time-shift is cunningly conveyed by the use of a clever new caption which precedes the new missions ... "Istanbul, six months later".

After this you're on your own. Very much on your own, in fact, as you start these new missions exactly where you finished the old, in sole charge of the Wildcats, without any help from your departed mentor, James 'Hawk' Stern.

The rest of the gang, however, is still very much alive and kicking: Tex is still your buddy, Billy is still a pain in the 'six', Gwen still fancies you and Miguel still complains he's having trouble keeping

the squadron in the air (he is, if you will, Strike Commander's very own 'Scotty').

True SC fans, I suppose, will be happy to be reunited with all of their old friends and adversaries, but for me the re-introduction of the same old cast and the same old group dynamics are symptomatic of the main problem with this add-on when all the new cosmetics are brushed aside, it's nothing more than 11 megabytes more of the same old thing.

This, of course, will be manna from heaven for the die-hard Strike Commander fanatic who felt a great gaping hole enter his or her soul when the original missions ran out.

But for the rest of us? Twenty quid is a lot of money to spend on an add-on disk which offers very little by way of variety, innovation or surprise.

The original Strike Commander was as appetising as Christmas lunch – Tactical Operations, on the other hand, is turkey sandwiches on Boxing Day.

■ Ciarán Brennan

Techspec

Obviously you already need Strike Commander to qualify for Tactical Operations, but at least this add-on operates even with the

lowest possible spec of the original game. That said, the whole kit and caboodle occupies an obscene amount of precious data space.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	11Mb

Graphic modes

CGA	x	EGA	✓	Tandy	x
VGA	✓	SVGA	✓		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	4Mb
Free RAM required	586K

rating **7**

Verdict

A bonus for SC junkies, an unnecessary extravagance for everyone else



Premier Mail Order

Please send cheque/PO made out to Premier Mail Order. Access/Visa No. and expiry date to:

Dept PCR 26, 10 Tinkler Side, Basildon, Essex SS14 1LE

Please state make and model of computer when ordering. P&P and VAT is included for all UK orders. Please add £2.00 for Europe and £3.50 for the Rest Of the World
Telephone orders: Mon-Fri 9am-7pm. Sat. & Sun 10am-4pm. **TELEPHONE orders: 0268 271172.** Facsimile orders: 0268 271173

Next day service available add £4.00. Per Item We are open 364 days a year.

E&OE

3D Construction Kit 2	£32.99	F1	£19.99	Links Firestone (SVGA)	£16.99	Sherlock Holmes	£28.99
3D Designer	£12.99	F14 Tomcat	£12.99	Links Hyatt Dorado (VGA)	£15.99	Sherlock Holmes 1	CD ROM £27.99
7TH Guest	CD ROM £49.99	F117A Nighthawk	£26.49	LINKS INNISBROOK (SVGA)	£15.99	Sherlock Holmes 2	CD ROM £32.99
7 Cities of Gold	£26.99	F15 Strike Eagle 3	£27.99	Links Kapulu Course (SVGA)	£15.99	Sherlock Holmes 3	CD ROM £32.99
1869	£22.99	F15 Strike Eagle 2/Blues Brothers	CD ROM £19.99	Links Mauna Keo (SVGA)	£15.99	Sherlock Holmes Cons Detective	£32.99
A320 Airbus (Edition Europa)	£30.49	F16 Combat Pilot	£8.99	Links Pinhurst (SVGA)	£15.99	Shuttle	(See The Greatest)
A320 AIRBUS (USA)	£30.49	F117A Nighthawk	£26.49	Links St Andrews Course (SVGA)	£15.99	Shuttle	CD-ROM £29.99
A Train	£29.99	F19 Stealth Fighter/Titus The Fox	CD ROM £19.99	Links The Belfry (SVGA)	£15.99	Silent Service 2	(See Lords of Power)
A Train Construction Kit	£22.99	F29	£11.99	Links The Challenge of Golf	£12.99	Silverball	£26.99
Acas of the Pacific	£25.99	FA Premier League Football	£19.99	Links Troon North (VGA)	£13.99	SIMON THE SORCERER	£26.99
Acas of the Pacific Expansion Disk	£13.99	Falcon	£10.99	Little Devil	£26.99	Sim City Deluxe	£26.99
ACES OVER EUROPE	£26.99	FALCON 3 (DOS 5.0)	£28.99	Living Pinball	£19.99	Sim City Populous	£19.99
Action Sport	£19.99	Falcon 3 0 Mission Disk (Optiger)	£16.99	Lombard RAC Rally	£8.99	Sim Farm	£25.99
Advantage Tennis	£19.99	FALCON 3.0 (MIG-29 DEADLY ADVERSARY)	£16.99	London	CD-ROM £26.99	Sim Life	£27.99
Advantage Tennis	CD ROM £27.99	Fantastic Worlds	£26.99	Loom	CD ROM £32.99	SSN-21 Sea Wolf	£29.99
Air Combat Classics - (compilation)	27.99	Fantasy Empires	£26.99	LORDS OF POWER - (COMPILATION)	£29.99	SOCCERKID	£19.99
Air Commander	£23.99	Fields of Glory	£27.99	Lord of The Rings	CD-ROM £27.99	Soccer Stars Compilation	£16.99
Air Warrior	£26.99	Fire & Ice	£21.99	LOTUS	£22.99	Solitaires Journey	£27.99
ALIEN BREED	£19.99	First Samurai	£20.99	Last Vikings	£22.99	Space Hulk	£24.99
Alone in the Dark	£27.99	Flashback	£23.99	Lure of The Temptress	(See See The Greatest)	SPACE LEGENDS	£22.99
Alone in the Dark 2	£27.99	Flight of The Intruder	£10.99	Maelstrom	£26.99	Space Quest 5	£25.99
Alone in the Dark + Jack In the Dark	CD ROM £29.99	Flight Sim 4 - Flight Adventure 701	£20.99	Magic Candle 2	£11.99	Space Quest Quad Pack	£28.99
Alone in the Dark + Jack In the Dark	27.99	Flight Sim 4 - Rescue Adventure 685	£20.99	Manchester United Premier League Champions	£19.99	Space Shuttle (Mindscape)	CD-ROM £27.99
Ambermoon	£22.99	Flight Sim 4 - Aircraft & Adv. Factory	£25.99	Mario is Missing	£27.99	Spear of Destiny	£25.99
Ambush At Sorinor	£25.99	Flight Sim 4 - Aircraft & Scene Designer	£24.99	Mavis Beacon II	£22.99	Speed Racer	£22.99
American Gladiators	£19.99	Flight Sim 4 East USA + Upgrade	£34.99	McDonald's Land	£17.99	Spelljammer	£24.99
Ancient Art of War in The Skies	£27.99	Flight Sim 4 - Flight Planner	£20.99	Mega Lo Mania	£22.99	Sports Masters	£22.99
Animation Classics	£29.99	Flight Sim 4 (Great Britain)	£24.99	Merchant Prince	£27.99	Star Lord	£27.99
ARCHER MACLEAN'S POOL	£20.99	Flight Sim 4 Hawaii Odyssey	£16.99	Microcosm	CD-ROM £32.99	Star Trek 25th	£24.99
Ashes of The Empire	£12.99	Flight Sim 4 Japan Scenery Disk	£16.99	MICROPROSE GOLF (D LEBBETTERS)	£16.99	Star Trek 25th Anniversary	CD-ROM £32.99
ATAC	£27.99	Flight Sim 4 Plane & Adventure	£27.99	MIG-29 DEADLY ADVERSARY	£16.99	Star Trek 2	£26.99
ATP	£27.99	Flight Sim 4 Trocan 2	£37.99	MIG 29 Super Fulcrum	(See Head To Head)	Steel Thunder	10.99
AV8B Harrier Assault	£26.99	Flight Sim 4 Warbirds	£29.99	Moonbase	£34.99	Storm Master	£8.99
B-17 Flying Fortress	£29.99	Flight Sim 4 Western European Tour	£16.99	Monopoly	£27.99	Stone Keep	£27.99
Batman Returns	£19.99	Flight Sim 4 (Zone 1 - France)	£22.99	Morph	£20.99	Strategy Masters	£22.99
Battle Chess	CD-ROM £29.99	Flight Sim 4 (Zone 2 - North Europe)	£22.99	MORTAL KOMBAT	22.99	Streethunter 2	£19.99
Battle Chess 4000	£22.99	Flight Sim 4 (Zone 6 - U.K)	£22.99	Napoleonic	£22.99	STRIKE COMMANDER	£26.99
Battle Isle Add on Disk	£16.99	Flight Sim 4 (Zone 7 - Germany)	£22.99	Nascar Challenge	£13.99	Strike Commander	CD ROM £32.99
Battle Isle '93	£17.99	Flight Sim 4 Toolkit	£29.99	Nick Folds Championship Golf	£19.99	Strike Commander (Speech Pack)	£13.99
Battletech 2	CD ROM £12.99	FLIGHT SIMULATOR 5	£34.99	Nigel Mansell's World Champ	£22.99	STRIKE COMMANDER TACTICAL OPS	£13.99
Battletoads	£17.99	Forgotten Castle	£27.99	No Greater Glory	£22.99	Strike Fleet	£9.99
Beneath Steel Sky	£22.99	FORMULA ONE GRAND PRIX	£27.99	NFL Football	£25.99	Striker	£19.99
Beauty & The Beast	£20.99	Freddy Pharkas Frontier Pharmacist	£26.99	NHL Hockey	£22.99	Stronghold	£24.99
Betrayal At Krondor	£27.99	Front Page Sports Football Pro Edition	£26.99	NIPPON SAFES	£22.99	Stunt Island	£29.99
Birds Of Prey	£11.99	Gabriel Knight	£32.99	Omar Sharif's Bridge	£24.99	Sub War 2050	£27.99
Blade of Destiny	£27.99	Gory Grigsky's War in Russia	£27.99	Oregano	£27.99	Super League Manager	£19.99
Blues Brothers	CD ROM £12.99	Gateway	£22.99	Pacific Strike	£29.99	SYNDICATE	£26.99
Blue Force	£26.99	Gateway 2	£26.99	Pacific War	£25.99	Syndicate Data Disk	£13.99
BODY BLOWS	£19.99	GOAL	£22.99	Patriot	£22.99	Tales of Magic	£24.99
Burning Rubber	£19.99	GOLDEN 7 (COMPILATION)	CD ROM £29.99	Patriot (Speech Pack)	£13.99	Task Force 1942	£27.99
BWING MISSION DISK	£13.99	Great Naval Battles	£27.99	Perfect General	(See Lords of Power)	Tetris	£17.99
Caesar	£22.99	Great Naval Battles	CD ROM £26.99	Perfect General	£27.99	T.F.X.	£27.99
Caesar's Palace	£23.99	Great Naval Battles (Super Ships)	£12.99	Perfect General Scenario Disk	£13.99	The Animation Studio (Disney)	£29.99
Campaign	CD-ROM £29.99	Great Naval Battles Scenario Builder	£13.99	PGA Tour Golf +	£23.99	The Complete Chess System	£22.99
Campaign 2	£24.99	Gunship/Crazy Cars 3	CD ROM £19.99	PGA Tour Golf Tournament Courses	£10.99	THE GREATEST	£24.99
Captive 2	£22.99	Gunship 2000	£26.99	PINBALL DREAMS	£22.99	The Greatest	CD-ROM £27.99
Car & Driver	(See Excellent Games)	Gunship 2000 Data Disk	£17.99	Pinball Eight Ball Deluxe	£22.99	The Greatest - (Compilation)	£27.99
Carrier Strike	£26.99	Hanna Barbera Cartoon Animator	£29.99	Pinball Magic	£7.99	The Labyrinth of Time	CD ROM £29.99
Carriers At War	£23.99	Harpoon (Updated)	£22.99	Pinball Windows	£22.99	The Legend of Myro	£20.99
Carriers At War II	£27.99	Harpoon Battleset 3 or 4	£11.99	Pirates Gold	£22.99	Titus The Fox	£16.99
Castles II	£23.99	Harpoon Designer	£13.99	Populous & Promised Lands	£10.99	Titus The Fox/Ghostbuster 2	CD ROM £12.99
Championship Manager	£19.99	Harpoon Scenario Editor	£13.99	Populous 2+	(See Excellent Games)	Tony La Russa Baseball	£22.99
Championship Manager '94 Season Disk	£7.99	Harpoon II	£27.99	Powermonger	£11.99	Tony La Russa AL/NL Stadium / Disk	£17.99
Chess Maniac 5 Billion & One	£22.99	Harrier Jump Jet	£27.99	Power Tactics	£22.99	TORNADO	£26.99
Chuck Yeager Air Combat	£11.99	Head to Head (F19/Mig 29)	£24.99	Prehistoric 2	£20.99	Tornado (Operation Desert Storm)	£17.99
Civilisation	£26.99	High Command	£27.99	Premier Manager	£20.99	Tornado (Mission Builder)	£17.99
Clash of Steel	£25.99	HIRED GUNS	£27.99	Premier Manager 2	£22.99	Town With No Name	CD ROM £12.99
Combat Classics	£22.99	History Line (1914-1918)	£26.99	Prince of Persia II	£10.99	Trodders	£17.99
Commonche Max Overkill	£27.99	History Line	CD-ROM £29.99	PRINT SHOP DELUXE	£25.99	Trolls	£12.99
Commonche Mission Disk 1	£13.99	Hound of The Baskervilles	CD ROM £12.99	PRIVATEER	£29.99	Ultima 6 (The Silver Seed)	£13.99
Commonche Mission Disk 2	£13.99	Indyapolis 500	£12.99	Privateer Speech Accessory Pack	£13.99	Ultima 7 (The Black Gate)	£26.99
Conquered Kingdoms	£32.99	Indiana Jones Adventure	£24.99	Protostar	£26.99	Ultima 7 (The Serpent Isle)	£25.99
Conspiracy	£27.99	Indy Jones Fate of Atlantis Adventure	CD-ROM £27.99	Protostar	CD-ROM £26.99	Ultima Trilogy 2	£26.99
Contraptions	CD ROM £24.99	Innocent	£27.99	Ragnarock	£26.99	Ultima Underworld	£26.99
Crazy Cars 3	CD ROM £12.99	Innocent Until Caught	£25.99	Rags to Riches	£26.99	Ultim Underworld 2	£26.99
Creation	£37.99	International Open Golf Champ	£19.99	RAILROAD TYCOON DELUXE	£26.99	Ultim Underworld 1 & 2	CD-ROM £29.99
Crystals Of Aborea	£8.99	Ishar	£19.99	Railroad Tycoon	(See Lords of Power)	Unnecessary Roughness	£26.99
Cute & Cuddles	CD-ROM £29.99	Ishar 2	£20.99	Reach for the Skies	£24.99	Utopia Double Pack	£22.99
Cyberace	£27.99	ITN World News '92	CD-ROM £49.99	Red Baron	(See Lords Of Power)	V For Victory 1 (Utah Beach)	£23.99
Demonsgate	£22.99	James Pond 2	(See Excellent Games)	Red Baron Data Disk	£16.99	V For Victory 2 (Russian Front)	£23.99
Dogger of Amon Ra	£26.99	Jimmy Whites Snooker	(See Excellent Games)	Return of The Phantom	£27.99	V For Victory 3 (Market Garden)	£27.99
Dorkmire	£25.99	John Madden 2	£20.99	Return to Zork	£28.99	V FOR VICTORY 4 (GOLD, JUNO, SWORD)	£25.99
Darkside of Xen	£27.99	Jurassic Park	£28.99	Return to Zork	£28.99	Veil of Darkness	£24.99
DARK SUN SHATTERED LANDS	£28.99	KASPOROV'S GAMBIT	£27.99	Return to Zork	CD-ROM £32.99	Virtual Worlds	£29.99
DAY OF THE TENTACLE	£27.99	Kick Off 2	(see Soccer Stars)	Rocketeer	£19.99	Wayne Gretsky 3	£27.99
Day of the Tentacle	CD-ROM £29.99	Kings Quest 6	£32.99	Roger Rabbit (Hare Raising Havoc)	£19.99	Wholes Voyage	£22.99
Dennis	£19.99	Knight of The Sky/Ghostbusters 2	CD ROM £12.99	Roger Rabbit & Sound Source	£35.99	When Two Worlds War	£25.99
Dizzy Collection	£19.99	Lands of Lore	£26.99	Rome AD92	£24.99	Wing Commander Academy	(See Space Legends)
Dogfight	£19.99	Legacy	£27.99	Rules of Engagement	£19.99	Wing Commander 2 + Speech Pack	£26.99
Drocula	£20.99	Legend of Kyrandia	CD-ROM £30.99	Ryder Cup	CD ROM £26.99	Wing Commander Deluxe	£32.99
Dream Team	£26.99	Legend of Kyrandia 2	£22.99	SCRABBLE	£20.99	Wing Commander 1 Secret Missions 1 & 2	£16.99
Dreamweb	(See The Greatest)	Legends of Valour	£26.99	Seal Team	£24.99	Wing Commander II Special Ops 1	£9.99
Dune	CD-ROM £29.99	Leisure Suit Larry 1	CD-ROM £27.99	Secret of Monkey Island	£20.99	Wing Commander II Special Ops 2	£9.99
Dune II	£23.99	Leisure Suit Larry 6	£27.99	Secret Of Monkey Island 2	£23.99	Wizkid	£21.99
Dungeon Master 2	£26.99	Lemmings 1 & Oh No Not More Lemmings	CD-ROM £27.99	Secret Of Monkey Island 1	£12.99	WolfPack	CD ROM £26.99
Dynablasters	£23.99	Lemmings Double Pack	£27.99	Secret of Monkey	CD-ROM £30.99	World of Legends	£17.99
Elite Plus	(See Space Legends)	LEMMINGS 2 (The Tribes)	£25.99	Secret Of Monkey Island 2	£23.99	W.W.F 1	(See Dream Team)
ELITE 2 (FRONTIER)	£26.99	LHX Attack Chopper	£12.99	SENSIBLE SOCCER	£21.99	Xmas Lemmings	£13.99
European Champions	£19.99	LINKS 386 PRO (SVGA)	£29.99	Shadow Caster	£27.99	X WING	£27.99
Even More Incredible Machines	£26.99	Links Bonk Springs (SVGA)	£15.99	Shadowlands	£22.99	XWING, B WING MISSION DISK	£13.99
EXCELLENT GAMES - (COMPILATION)	£26.99	Links Barton Creek (VGA)	£15.99	Shadow of The Comet	£24.99	X-WING IMPERIAL PURSUIT MISSION DISK	£17.99
Eye of the Beholder 2	£23.99	Links Bayhill (VGA)	£15.99	Shadow of The Comet	CD ROM £29.99	YO JOE	£19.99
Eye of the Beholder 3	£26.99	Links Beautiful (VGA)	£15.99	Shadowlands	£22.99	Zoo	£21.99
Eye of the Storm	£22.99						

EDUCATIONAL

ADI English (11-12) or (12-13) or (13-14)	£17.99
ADI Maths (11-12) or (12-13) or (13-14)	£17.99
ADI French (11-12) or (12-13) or (13-14)	£17.99
Better Maths (12-16)	£13.99
Better Spelling (8+)	£13.99
Biology (12-16)	£13.99
Cave Maze (8-13 Years)	£10.99
Chemistry (12-16)	£13.99
Fatty Bears Birthday Surprise (4-7)	£22.99
Fraction Gobblins (8-13 Years)	£10.99
Fun School 2 (6-8)	£8.99
Fun School 2 (+8)	£8.99
Fun School 2 (U6)	£8.99
Fun School 4 (5-7)	£16.99
Fun School 4 (7-11)	£16.99
Fun School 4 (U5)	£16.99
Junior Typist (4-10)	£13.99
Magic Maths (4-8)	£13.99
Mario Teaches Touch Typing	£19.99
Maths Dragons (5-12 Years)	£10.99
Merlin's Maths (5-13)	£17.99
Mickey's 123's (2-5)	£16.99
Mickey's ABC's (2-5)	£16.99
Mickey's Colours & Shapes (2-5)	£16.99
Mickey's Jigsaw Puzzles (5+)	£16.99
Mickey's Memory Challenge (5+)	£16.99
Mixed up fairy tales	£22.99
Noddy's Big Adventure (3-7)	£19.99
Noddy's Big Adventure (3-7) Windows	£22.99
Noddy's Playtime (3-7)	£16.99
Paint & Create (5+)	£17.99
Physics (12-16)	£13.99
Picture Fractions (7-10 Years)	£10.99
PlayRoom (3-8)	£17.99
Play School (3-8)	£13.99
Reasoning Wit Trills (5-12 Years)	£10.99
Spelling Fair (7-12)	£20.99
Tidy The House	£10.99

JUNIOR ADVENTURE

A Christmas Carol (+8)	£13.99
Robin Hood (8+)	£13.99
The Three Bears (5-10)	£13.99
The Wind in The Willows	£13.99
The Wizard Of Oz (+6)	£13.99

SPECIAL OFFERS

Blues Brothers	£8.99
Crazy Cars 3	£12.99
Jack Nicklaus unlimited Golf	£12.99
Jack Nicklaus Courses (Pebble Beach etc)	£7.99
Jack Nicklaus Courses (St Andrews etc)	£7.99
Jack Nicklaus Courses (Royal Birkdale etc)	£7.99
Laser Squad	£9.99
Microprose Golf (D Ledbetters)	£16.99
Paperboy 2	£9.99
Shadowlands	£9.99
Vikings	£9.99
World Class Rugby (Five Nations)	£9.99

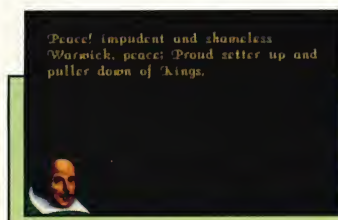
JOYSTICKS & ACCESSORIES

Disk Box (80 Capacity)	£6.99
Disk Box (40 Capacity)	£4.99
Gravis Analog Joystick	£34.99
Gravis Analog Pro	£39.99
Gravis Dual Eliminator PC Game Port	£24.99
Maxx Two Flight Yoke	£64.99
Maxx Two Rudder Pedals	£49.99
Quickjoy M5 SV201	£15.99
Quickjoy M6 SV202	£11.99
Quickjoy Topstar SV227	£19.99
The Sound Source	£22.99
Suncom Analog Edge	£16.99
Suncom Analog Sabre	£15.99
Suncom Analog Plus	£17.99
Suncom Analog Extra	£19.99
Suncom FX2000 (Left & Right Handed)	£19.99
Technoplus Hawk Junior (Digital)	£9.99
Technoplus Hawk Plus (Analog)	£11.99

3.5" BLANK DISKS

TDK/VERBATIM (BOXED)	PRECISION (BOXED)		UNBRANDED (LOOSE)	
	LOW	HIGH	LOW	HIGH
10 x	7.99	9.99	6.49	7.99
20 x	14.50	19.50	11.99	15.50
50 x	35.00	47.50	26.00	37.50
100 x	65.00	95.00	49.99	72.99
200 x	125.00	190.00	94.99	141.99
500 x	300.00	470.00	219.99	350.00
1000 x	580.00	930.00	419.99	680.00

RECYCLED BLANK DS/DD (LOW)



Title	Kingmaker
Publisher	US Gold
Contact	(021) 625 3366
Price	£37.99



Kingmaker

The board game Kingmaker has been around since the early 70s, and this new computer version is a faithful rendition of the original – but is it perhaps a little too faithful?

As if the prospect of violent death isn't enough, there's also plague. It's just hit Plymouth, but luckily my nearest noble is safely tucked up in a castle to the north.

If you don't fancy controlling the battle, you can fall back on the board game mechanism and trust to luck. I've got 230:70 here (3:1) which is my kind of odds.

Kingmaker is a game of ruthless strategy and intrigue set during the Wars of the Roses, played on a colourful map of England divided into irregular squares. You control a baronial faction and your object is to seize a royal heir, defeat up to five other factions, murder their royal heirs and make yours the sole crowned king (hence the title). It's not for the socially well-adjusted, which is probably why I like it. Many of the game mechanisms are highly ingenious.

Take, for instance, the way in which factions are composed. At the start, you are dealt a 'hand', a random set of cards.

Some of these cards represent nobles, the basic playing pieces, and a noble comes with one or more castles and anything from 10 to 100 troops. The rest of your cards are an assortment of titles, offices, bishoprics, ships, etc, which you allocate as you see fit.

In no time at all, you can transform a lowly character like Herbert (one castle and 10 men) into a mediaeval Terminator by giving him an earldom (another 30 or 40 men), an office (Marshal of England brings in a hundred), plus assorted companies of mercenaries. Join him up with a few like-minded psychopaths (and the Middle Ages were full of them) and you're

in business. Trying to keep your forces together will be another matter.

One of the beauties of the game is the way in which, the stronger you get, the more vulnerable you can become. This is because titles and offices come loaded with obligations. The aforementioned Marshal of England is a particular nightmare: having 100 extra troops is all very well, but you can guarantee that just as you're about to swoop on the enemy in Wales there'll be a French raid on the east coast and you'll have to deal with it. And no sooner have you seen to this than the serfs start rebelling for a square deal somewhere else and off you have to go to sort them out. These events are generated once each turn, and they usually end up leaving someone fatally exposed. Kingmaker is a game where all your best-laid plans are bound to go up in smoke.

As the cards are dealt randomly, no two games are alike, and your initial strategy



You've raised your standard and are ready for a tilt at the crown. Be warned, the stakes are high – one false move and the executioner's axe awaits ...

Alternatively...



Powermonger
Electronic Arts, £34.99
Bullfrog's isometric warfare game is often wrongly thought of as some kind of companion program to Populous. It isn't: it's a game of strategic invasion of a fictional land, using economic and social skills as well as more warmongering tactics. For example, you need to keep an eye on food supply and production in the kingdom for people will starve and armies mutiny if famine strikes. It's an epic and idiosyncratic game, which is aesthetically pleasing as well as a stiff challenge, and well worth a look — it's been somewhat underrated.



Castles II
Interplay, £34.99
Set in 14th century France, you play one of five nobles attempting to seize the crown after the death of King Charles. The plot is loosely based on the real life events of the time, but the game involves performing administrative, political and military 'tasks'. You need strengthen your domain's economy before you can power off to invade rival territory, and build your castles across the land. Although bigger than the original Castles, this sequel suffers from poor presentation, which detracts from the fact that there's a strong tactical game within.

is determined by the luck of the draw. Royal heirs are dotted about the map, and with luck you can nab one in the first few turns. However, the houses of Lancaster and York have strict lines of succession, and if you control, say, Richard of Gloucester, you can't crown him king while his elder brothers and father are still alive. This is where it gets bloody.

There are two kinds of conflict, sieges and battles, and you'll need to engage in both to defeat your opponents and seize all the heirs. Unfortunately, this has always been the weakest aspect of the board game: to win a battle all you have to do is compare the totals of the opposing forces and match a ratio drawn from a card pack (say 3:2 or 5:1). Sieges are even cruder: you just have to assemble a force which equals or exceeds that of the defender and the castle is yours.

To spice up the combat, the designers have therefore included the option to

switch to an isometric battle display where you can slug it out more realistically. As they rightly point out, mediaeval generals exercised very little control over their troops, and the result is that your own input is minimal and the battles end up looking like The Shed taking on the Stretford End. It's a step in the right direction, but I don't think the conversion to the computer format has gone far enough.

Kingmaker is one of the post-Diplomacy breed which involves some interaction, but that's missing here, because the computer version has been designed as a one-player game. The tension and excitement generated by a few human players battling it out over a board is thus absent. US Gold is shortly to release a patch disk (free of charge) with a two-player option, so judgement must be reserved, but as it stands it's lacking in atmosphere. It's also too slow, particularly if you fight against the maximum number of five rival factions.

The problem is that because of the rigid turn structure you only get to have one go in six. You take your move and then you have to sit around twiddling your thumbs for ages while your opponents take theirs. It's particularly frustrating, because the more factions in play the better the game. Fighting against only one faction drastically reduces the waiting time, but it also exposes the deficiencies in the artificial intelligence — whenever I've played at this level the computer has made too many poor moves to give me much trouble.

Despite my reservations, Kingmaker is still a fine game and many of its qualities continue to shine through. However, if you haven't played the original you may wonder what all the fuss is about.

Simon Shaw

Techspec

Not too much in the way of problems here with getting Kingmaker up and running, but do note that digitised speech is only an option if you already have a Sound Blaster Pro card.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	4Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	x	Keyboard	✓	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	1Mb
Free RAM required	590K

rating
6

Verdict

Better as a board game

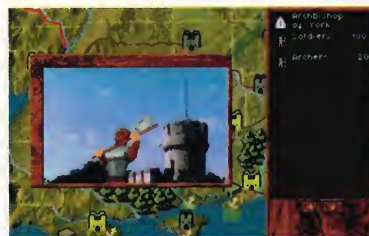
Two Minutes of pruning roses



My initial hand is displayed on the right. I've been lucky: Neville gets the Tower of London, which means he can grab the king, while Percy is a real Superman. Bishops are needed to crown pretenders, while the ship is useful for going to France or Ireland.



Talbot's faction launches an immediate assault on Harlech to seize the Yorkist heir Edward of March. The defenders only number 200 to the attackers' 400, so they don't have a chance. It looks like they're going to have to get the builders in.



And this is the price of failure: poor Edward is superfluous to Talbot's requirements and gets the chop. You have the option either to execute any barons who fall into your hands or to hold them for ransom — a useful way of picking up extra cards.



My turn and I've pounced on Talbot's nearest henchman. You give orders to troops by click-dragging the mouse to the area you want to attack, but don't expect them to take much notice. So far it's Blues 2 Reds 1, and we'll be back shortly for the second half ...

BURSTING WITH FUN!



WHERE LEARNING COMES NATURALLY

Play is the most natural thing in the world for children. And as they play, they can learn.

Mould-breaking software from Scops encourages children to develop important skills such as reading, logical thinking, concentration and memory as they take part in an exciting adventure or tackle a challenging puzzle.

Using digitized speech, humorous sound effects and stunning graphics, Scops Software stimulates the imagination and the natural creativity that's in every child.

Each game has a choice of options and multiple levels of difficulty, ensuring that the pace is gentle and that progress is individual.

This software is loaded with intelligence and bursting with fun!

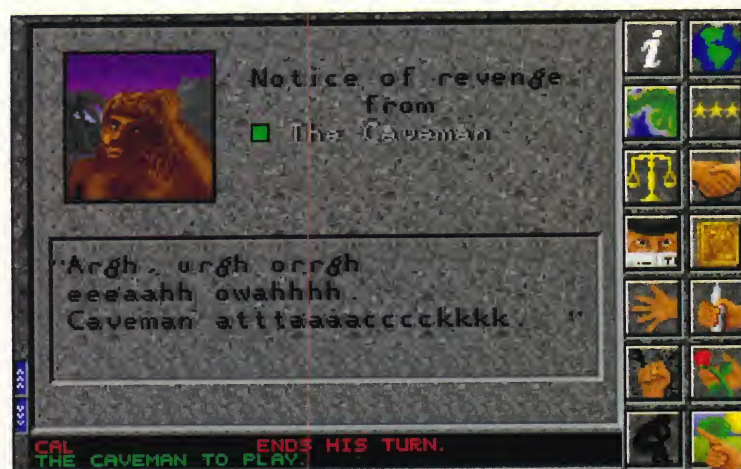
Scops, where learning comes naturally.

SCOPS SOFTWARE LIMITED, UNIT 2, ABBEY BUSINESS PARK, MONKS WALK, FARNHAM, SURREY GU9 8HT. TEL: 0252 722223 FAX: 0252 711800

GLOBAL DOMINATION

Title	Global Domination
Publisher	Impressions
Contact	(071) 351 2133
Price	£39.99

With such an unambiguous title, it's not too difficult to guess what this game is all about. Megalomania starts here



Global Domination

Ever wanted to rule the world? Me neither. All that worrying about defence budgets, assassination attempts and who's going to invade you next is enough to keep anyone awake at night. Let's face it, it's enough of a hassle trying to decide what you're going to eat for lunch. But what if you could rule the world from the safety of your own home? Well, that's another matter.

Global Domination gives you the stunning opportunity to test your military know-how to the limit, and you've still got time to nip into the pub for a quick pint afterwards.

In case you hadn't guessed, Global Domination is world conquest simulation. It's rather like the Risk board game. Starting with a handful of small territories, the general idea is to expand your empire by creating armies and then use

them to take over neutral or enemy controlled zones. In the most basic terms possible, you have a certain amount of units to spend which you may allocate to troops or transport. The more you spend on transport, more often you can move each turn. Each army is restricted to one move per turn, but you can create as many armies as you want, providing that you have the resources to do so. The more territories you control, the greater the amount of resources you have available to you. And so on.

I realise I've made it sound incredibly dull, but it's actually quite engrossing. I'd recommend that anyone new to strategy games ought to play Global Domination on the simplest level, but once you're happy with the game you might want to try upping the complexity. On the more advanced levels you can make pacts and alliances with the enemy to give you more

security while you attack other opponents, or you could send out spies and even use subversive activity to start revolutions.

Another option enables you to influence individual battles by taking part via a satellite link. These real-time tactical battles are good fun to play, but they're entirely optional, so if you don't want to get involved, the conflict will be resolved by the computer.

You have the choice of playing Global Domination on your own against computer controlled opponents, or you can take on your friends either on the same PC or via a modem link. There are nine computer controlled opponents, each with

Above: Some of your enemies are less intelligent than others, but none of them will be very chuffed if you keep attacking them.

Below right: If you want, you can use the satellite mode to get directly involved in battles, but since this can make the game a trifle long-winded, this feature is entirely optional.

Alternatively...



Civilization
MicroProse, £39.99
Rated 7, Issue 1

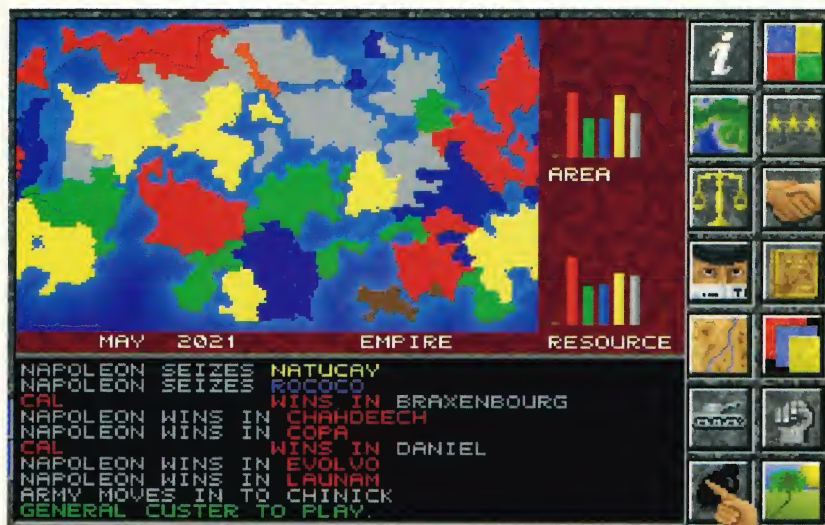
The aim is to advance your people from a bunch of Stone Age primitives to a nation of rocket scientists, picking up new technology, exploring your world and grinding rival civilisations into the dust as you go. It's involving, interesting, addictive and even educational, and you don't have to be a strategy buff to enjoy it. If you haven't played it yet, go out and do so. Now.



Battle Isle 93
Blue Byte, £25.95
Rated 7, Issue 21

This futuristic strategy game will appeal to just about anyone. Although hex-based, it's far more accessible than most war games, and all information can be accessed on screen rather than from a hefty manual. The single player game is both absorbing and challenging, but in two player mode it really comes into its own. A well thought-out game with a strong design. Recommended.





This is one of the randomly generated worlds, and I'm up against some stiff opposition. Unconquered territories are brown, whilst territories in which a war is taking place are orange. I'm red, so I can't be doing that badly.

their own distinct personalities. The half-witted caveman is the easiest to beat, but the others, who include Bismarck, Julius Caesar, General Custer, Genghis Khan, Henry V, Abe Lincoln, Napoleon and Queen Victoria, are rather more difficult. You'll need different strategies for dealing with each opponent: for example, it's futile trying to make a pact with Genghis Khan because he's likely to break it, whereas Lincoln is a good deal more trustworthy. After a while you'll get the hang of beating them all, which is why it's nice to be able to play against some human opposition for a change.

Another thing that can be changed is the world map. If you get bored with playing the Earth, there's an option to generate random worlds. This takes a little time, but it means that you never have to play

the same world twice, adding some pleasing variety to the gameplay. All game options are accessed via point and click icons on the right hand side of the screen. The control system is reasonably intuitive on the whole, but even so, Global Domination is not one of those games you simply pick up and play straightaway. You should at least have a quick flick through the manual beforehand, because otherwise you'll

get nowhere fast. Believe me, I've tried. Although I'm not a great fan of manuals (I tend only to read them if it's absolutely necessary), the Global Domination effort was well laid out and I had no trouble finding my way around it. Global Domination doesn't have the most breathtaking graphics I've ever seen, but a game like this doesn't need them. So long as I can see where everything is without getting an eye-strain induced headache, I'm happy, and Global Domination fills these requirements quite easily. Territories are colour coded according to who is occupying them, and armies are simply represented by bullets. The bigger the army, the larger the bullet, so it's easy to tell if your army is equipped to take on the enemy.

I wouldn't normally expect a game like this to have good sound, but the music in Global Domination isn't bad at all. The game starts with a rather dodgy rendition of Wagner's Ride of the Valkyries (I love the smell of napalm in the morning, and all that) but things improve considerably after that. You can, of course, turn it off if it becomes too distracting.

I have to say that I didn't enjoy playing Global Domination quite as much as Civilization, but that's hardly surprising when you consider that Civilization is one of my all time favourite games.

Still, Global Domination has plenty going for it in its own right. It has a strangely addictive quality: I'd get tired of it after playing for a few hours, but after a break I just had to get back to it and give it another shot. Experienced players might find it a bit too simplistic in comparison to other war games, but the multi-player option prolongs its life somewhat. If you enjoy playing Risk or are looking for a good introduction to the strategy genre, look no further.

■ Cal Jones

Two Minutes of risky business

I'm playing at a very basic level here. No treaties, no revolutions, no subterfuge and only a mentally deficient caveman between me and victory. As simple as it gets, but it still isn't easy ...



This screen is where you choose your foes. The shadowy figure represents the player and the question mark picks your enemies at random. The telephone icon (bottom left) is for those playing via the modem link.



At the start of the game, you only have a few territories. I'm playing as red; the caveman, green. At this stage, there are a lot of neutral areas - capture as many of these as possible to increase your resources.



The logistics screen is where you determine the size and mobility of your armies. To form an army, select the type and size you need, return to the main screen, click on the bullet icon and place it using the open hand icon.



I've defeated the troglodyte using very simple tactics. So long as your invading armies are larger than your enemy's defending units, you nearly always win. On the easy level, anyway.

Techspec

Global Domination runs on a 286 or faster with MS-DOS 3.0 or higher, although Impressions recommends a 386SX or faster and Microsoft compatible mouse to get the best out of it. It also supports the Aria sound card.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	2.8Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	✓	Mouse	x
----------	---	----------	---	-------	---

Performance

Optimum speed	16MHz
Minimum memory	640K
Free RAM required	600K

rating
7

Verdict

A good introduction to strategy games

"The humor and originality of Zork
are always present... its images are the most spectacular
in the history of video games."

-JOYSTICK MAGAZINE

"The interface may be revolutionary [and] allows a richness
that has been absent heretofore in graphic adventures."

-Johnny L. Wilson, COMPUTER GAMING WORLD

An epic adventure...underground.

RETURN TO ZORK™



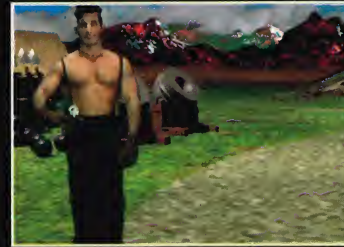
A Cast of Hollywood Actors



Over 1 hour of Spoken Dialogue



Revisit Flood Control Dam #3



Try to Outwit Devious Dwarves

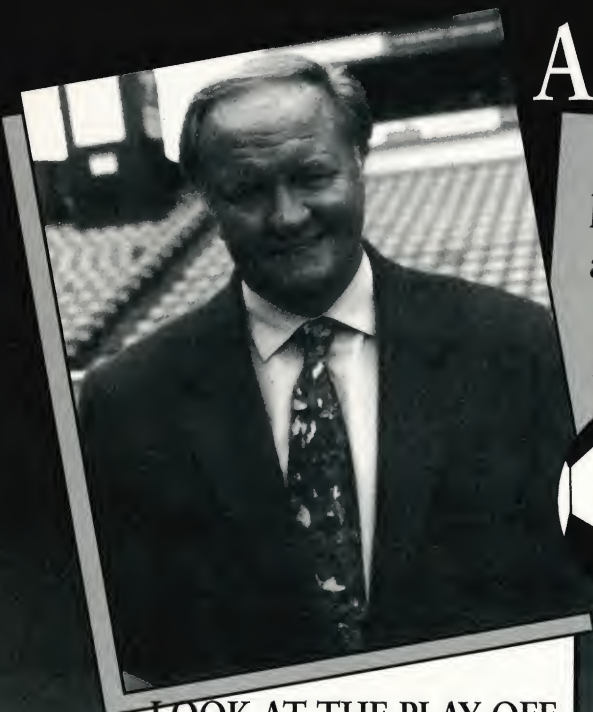
STARRING JASON HERVEY ROBIN LIVELY A.J. LANGER JASON LIVELY EDAN GROSS SAM JONES PRODUCED BY INFOCOM IN ASSOCIATION WITH ACTIVISION PRODUCTION DESIGNER JOE ASPERIN SCREENPLAY BY MICHELE EM
MUSIC BY NATHAN WANG AND TERI MASON SPECIAL EFFECTS BY WILLIAM VOLK BASED ON A DESIGN BY DOUG BARNETT EXECUTIVE PRODUCER EDDIE DOMBROWER DIRECTED BY PETER SPRAGUE INFOCOM ACTIVISION

Available for IBM and Compatibles. Enhanced version for CD-ROM also available.

For more information, please call the offices at (0295) 252 524.

PREMIER CHALLENGE

ARE YOU ON THE BALL?












"The Premiership is probably the toughest league in the world. Winning it means building a team capable of beating the opposition game after game, week in, week out. Making a Premiership Challenge is tough, definitely not for the faint-hearted"



Ron Atkinson

RON ATKINSON - MANAGER

LOOK AT THE PLAY OFF

-  Windows 3.1 program (DOS version available)
This makes it a unique soccer simulation.
-  Sophisticated artificial intelligence techniques.
Games are actually PLAYED by the computer, NOT generated in a random manner.
-  All 4 English Divisions present, FA Cup, League Cup and playoffs. Choose your team, and where you want to start.
-  Full transfer market (over 1500 players)
-  First Team, Reserve Team and Youth Team.
Buy players or "grow your own".
-  Optional realistic finances. If your manager is no good you can see if you could survive on the gates without him.
-  Training, match tactics, unlimited formations.
-  No gimmicks. This is PURE football.
-  "Cheat mode" - If you can't stand to lose.

10% of all profits go direct to
Sheffield Children's Hospital

For every copy sold
a tree is planted by the
Rainforest Preservation Society

ONLY
£24.95 (inc VAT/P&P)
FOR A LIMITED PERIOD

Fill in the coupon now
or Fax or Phone your order
TEL: (0582) 562222
FAX: (0582) 502953

YOUR MISSION

(should you decide to accept)

is to make a Premiership Challenge

*Have you got what it takes
to guide your team to the top?*

*Deliver a full trophy cabinet
and become a local hero.*



Usually £34.95 (inc VAT/P&P),
but until the end of February 1994
we are offering Premier Challenge for only £24.95

Registered users will receive a voucher
for a 25% discount on all further games we produce.
(there's already a world-cup game in the pipeline)

T'ai Chi Software, 16 Wellgate Road, Luton, Bedfordshire LU4 9TD

I ACCEPT THE MISSION

Please send me game/s of PREMIER CHALLENGE @ £24.95 each (inc VAT/P&P)

System required: Windows 3.1 ☐ DOS ☐

Amount enclosed Access/Visa ☐
If cheque ☐ Delete as appropriate ☐

Signature Card Expiry Date

NAME

ADDRESS

POSTCODE DAYTIME TEL. NO.

SEND TO: T'ai Chi Software, 16 Wellgate Road, Luton, Bedfordshire LU4 9TD



Title Gold Juno Sword
Publisher Electronic Arts
Contact (0753) 549442
Price £39.99

This is the fourth game in the V for Victory series. The third, Market Garden, was played on a long, thin map like a strip of wallpaper. Gold Juno Sword, by contrast, uses a broad, but shallow, playing area. Nothing else in the game, however, could be described as shallow.

GJS recreates the British/Commonwealth sector of the Normandy landings. All the familiar names are there, from the Orne bridges to Villers-Bocage and back to Caen, the linchpin. These famous actions, and many more, are dealt with in the various scenarios which culminate, as ever, in a massive campaign game.

I'm playing this at the moment from the German side and it's not easy, despite my being able to call on the most powerful units available in the entire series. The Allies' bombardment capacity (air and naval) is a great leveller and the artificial intelligence seems more than adequate. I've read some criticism of the AI in the past, but I've only found it a problem in Velikye Luki, where the map is so vast that the computer occasionally has difficulty with the supply lines. But in GJS there's none of the fluid manoeuvre that you experienced in the earlier game; this is more of an attritional slog through the notorious Normandy hedgerows.

Gold Juno Sword

Weather conditions, tactical and strategic information are easy to access as the campaign progresses in GJS.

The German position is looking thin at the moment, but reinforcements are on the way in the shape of the elite 12 Panzer SS Division.

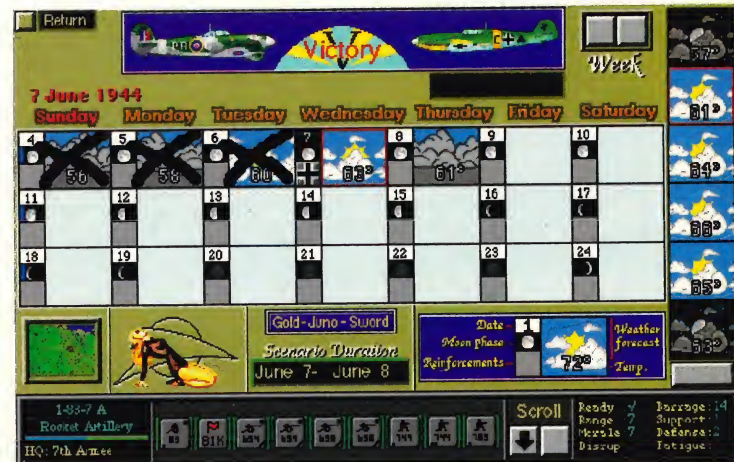
There is no doubt that the V for V system takes time to get the hang of but, once learnt, is remarkably straightforward to use. The manuals, complete with detailed tutorials, are excellent. The interface and controls are faultless. And once you've mastered one game, you can play them all because, apart from a smattering of special rules, there's no real difference between any of them.

This has advantages and disadvantages, of course, but the former outweigh the latter. Game systems which don't develop often signify lazy designers, but V for V hasn't evolved much simply because it was so well prepared to begin with, it scarcely needed to. The amount of detail may be staggering but it's not overwhelming, and you are able to delegate a number of functions (like air or artillery support) to your computerised 'staff', which leaves you free to get on with the more tactical niceties – and there are easily enough of these to keep you occupied for a fair while.

GJS is a worthy addition to a series which remains, in my opinion, head and shoulders above everything else in the genre. Although the games are hex-based and apparently soaked through with the conventions of board gaming, they nonetheless

combine originality, playability and accuracy to an unmatched degree. Nor does Three Sixty Pacific show any signs of resting on its laurels: though Patriot is a bit of a disappointment, the imminent release of Harpoon 2 and War at Sea look like confirming the company's position as the undisputed leader in the field.

■ Simon Shaw



Techspec

GJS will run on a fast 386, but a 486 is recommended.

A maths co-processor is supported. A VESA compatible graphics card (512K) is needed. V for V games are memory-hungry: unless you're happy fiddling with your Config.sys file it's best to play from a boot disk.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	4.5Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	x	SVGA	x		

Soundboards

Ad Lib	✓	Roland	x	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

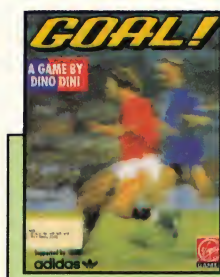
Joystick	x	Keyboard	x	Mouse	✓
----------	---	----------	---	-------	---

Performance

Optimum speed	33MHz
Minimum memory	600K
Free RAM required	3Mb

Verdict
Well up to scratch

rating
8



Title	Goal!
Publisher	Virgin
Contact	(081) 960 2255
Price	£35.99

As advance orders for USA World Cup 94 T-shirts are cancelled all over England, I abandon English football altogether, plump for Bayern Munchen and attempt to win the league.

Until recently, "the PC" and "good football games" were rarely mentioned in the same sentence (apart from the phrase, "The PC doesn't have any good football games, does it?"). Prior to Sensible Soccer, the football genre was full of laughable arcade efforts and dull, stat-heavy management games. But if team administration bores you rigid and you still haven't outgrown the dream of scoring a late winner at Wembley, then Goal! from Dino Dini might just provide the goalmouth drama you've been searching for.

Dino Dini is the chap who created Kick Off, a game that wasn't just huge on the Amiga, it was positively gigantic. Kick Off was the football game of all time, combining a frantic 'arcade' free-for-all with a set-piece designer, changeable tactics, a pitch scanner and oodles of gameplay. But when the curtain rose on the long-awaited PC conversion, Kick Off was revealed to be a shocking mess, an unplayable game beset by graphical glitches and an appalling control system.

Although, at first glance, Dino's latest football foray looks to be little more than a re-tweaked Kick Off variant, this time around it's actually very playable. The control method has remained essentially the same, but in Goal! Dino has crammed in a few new additions and, more impor-

Goal!

It looks like it's goodbye America for England and Scotland, at least, so as you wait for the inevitable World Cup axe to fall, why not banish your footballing woes with Dino Dini's Goal!

Although the zoomed out view shows you more of the pitch, the players are too tiny to make playing in this mode a viable option. But it is possible and I had more success this way than in the close-up view.

tantly, some much needed refinements.

If you're a Sensi veteran, the biggest immediate difference is one of scale. As you can see, Goal! has two specific match views: a close-up pitch view and a zoomed-out Sensible Soccer style view. Although the principal gaming view is the close-up, you can swap between the two modes or even play the whole match from the Sensi view.

Of course, as the viewpoint in Sensible Soccer enables you to see more of the pitch, Sensi is often a slower, more strategic game as a result. In Goal! your view of the action is much closer and more immediate. A pitch scanner is helpfully provided as a guide to the positions of your players, but due to the fast pace of the game, it's tricky to watch it with any regularity. What playing this system eventually establishes is team awareness, because as you can't always peek at the scanner it helps to be 'aware' of where your players are.

But if, like me, you're not comfortable stealing brief glances at a pitch scanner, zooming out enables you to see more of

the action: Sensi veterans, for example, will find that it's a lot easier to play.

Goal! and Sensible Soccer are bound to be compared, but, although similar in presentation and style, underneath the two are very different. For example, you can't use the same tactics in Goal! that work wonders for you in Sensi (I was stuffed 7-0 by Lazio in one of my first games) because Goal! has a much greater emphasis on realism.

Apart from the disorientating close-up viewpoint, one thing you were able to do in Sensible Soccer was to run 'through' your opponents. In Goal! this is impossible. Players shield the ball and shoulder-charge you out of the way making it much more difficult to put in a successful tackle.

In fact, the whole control system takes some serious getting used to, but some familiar features do remain, namely the free-rolling ball (ie, it's not glued to the players' feet), the contentious back-pass rule and a multitude of national and international club teams complete with current player names. The teams here are



Two Minutes of international humiliation



OK, I've played the odd game, had a quick practice on the field, so I think I'm ready. I've set up a small but perfectly formed league and my first victims are Gascoigne and Lazio.



Barely a minute gone in the first half and Signori slips past my four man defence and my sweeper to slot the ball neatly past my the despairing dive of my keeper. Oh dear.



On throw-ins and free-kicks, the view automatically switches to the zoomed out mode enabling you to plan your tactics more effectively. Once you get the ball, the view reverts.



Things are getting desperate and after a rash sliding tackle the ref points to the spot. Bacchi calmly taps in number seven before I even have time to dive. Goodbye league title.

so detailed that even the players personal statistics mirror their real life form.

As you will no doubt have guessed by now, Goal! is a much more complicated game than Sensible Soccer. I'm not ashamed to admit that I had a few teething troubles, so much so that the game forced me to switch off the computer, go away for five minutes and actually read the manual.

Goal! is played at a frantic pace and it takes a while before you can settle down and pass the ball around with some semblance of control. But if you persevere, you'll be rewarded with a game that plays much better than it looks.

Once you've mastered it, you'll find that although you have considerably less time on the ball you have more player control than you had in Sensible Soccer. You can trap the ball, chest it down and even perform acrobatic overhead kicks (although I haven't managed it so far). Goal! even gives you the opportunity when defending against a free kick to choose how many players you have in your wall and even where it stands. It's very comprehensive.



Of course, like Sensible Soccer, Goal! has a wealth of options that mean that you can change match length, the skill of the goalkeepers, computer effectiveness, replays and so on. The sound is distinctly average, because the game is mostly silent apart from the sound of the ball bouncing, the ref's whistle blowing and the sporadic 'oohs', 'aahs' and cheers from the expectant crowd.

I feel that Goal! offers the digital footballer the best of both football worlds with close-up arcade action and a Sensi-esque

The full screen view offers frantic arcade action on a variety of pitches ranging from muddy (above) to Wembley turf. There is also the option to view the whole thing horizontally which adds another dimension to the game.

strategic view. Goal! is really what PC Kick Off ought to have been, but although it's fast-paced and fun I still remain a true-blue Sensi addict. Why? Well, where in Goal! my play was frantic and often devoid of structure, in Sensi you do have more time to play a more attractive style of football. To me, it's simply a lot more satisfying to play.

If you want a little more realism in your arcade football then give Goal! some consideration because it's a great alternative to Sensible Soccer. Now all that remains for me to add is, "Come on, you Poles" and pray for a miracle.

■ Dean Evans

Alternatively...



Sensible Soccer Renegade, £34.99
Rated 9, Issue 22

In my opinion, Sensible Soccer is without doubt the best football game on the PC. The use of a wide screen view enables you to play a highly tactical game, and it's fast, frantic and very playable to boot. Sensi is only disappointing in that it falls just a bit short of the stunningly perfect Amiga version.



European Championship 92 Empire (Sports Masters compilation), £34.99
Rated 7, Issue 10

An oldie but still a game capable of putting on a decent show. The gameplay is simple, very basic: there are no team management options, one league and 12 teams. However, if there's two of you it's lots of fun for a while, but a huge question mark hangs over its longevity.

Techspec

Goal! needs 2Mb RAM to run, but it is one of those

programs that should cause you no problems at all. It's a small program (one disk only) and works as well on a slower 386 as it does on a fast 486.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	2Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	✓	Roland	✓	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	x	Mouse	x
----------	---	----------	---	-------	---

Performance

Optimum speed	25MHz 386
Minimum memory	2Mb
Free RAM required	590K

Verdict

Fast, frantic and a good alternative to Sensible Soccer

rating **7**

**UNBEATABLE
VALUE!**
Panasonic CD Bundle



● **LEGEND OF KYRANDIA** A totally absorbing classic game of magic, mystery and dark secrets. Discover the precious Kragem and the ultimate source of magic will be yours!

ONLY £259
or with Sound Galaxy Pro 16 Sound Card ONLY £379

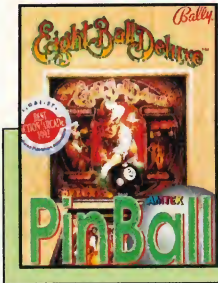
● **PANASONIC COMPATIBLE INTERFACE** Required if Sound card does not have Panasonic Interface

Mail Order – Please note that 7 banking days must be allowed for cheque clearance.

- **MPC WIZZARD** The most comprehensive collection of Windows 3.1, VGA and Sound Drives on one disc complete with a self running slide show.

● **SECRET WEAPONS OF THE LUFTWAFFE** This fantastic flight simulator on CD puts you in the seat of Hitler's experimental aircraft. Includes four different missions.

[illegible]



Title	Eight Ball Deluxe
Publisher	Amtex/Supervision
Contact	(0742) 753423
Price	£34.99

Eight Ball Deluxe

Let's face it, I'm a bit of a pinball addict. I managed to get myself well and truly hooked on 21st Century Entertainment's Pinball Dreams last issue – to such an extent that, six weeks later, my editor was still shouting, "Stop playing that wretched game!" across the office at me. Not surprisingly, I was rather overjoyed when Eight Ball Deluxe turned up on my desk because it meant that I had a legitimate excuse to start practising my flipper skills again.

Unlike Pinball Dreams and Sierra's Take a Break Pinball for Windows, this game is based on a real Bally table. Eight Ball Deluxe (the coin-op) has been sitting in seaside arcades and greasy spoon cafes for over 10 years, and, according to the blurb in the manual, is still very popular.

It's a big, old-fashioned looking table and Amtex has done quite a good job reproducing it on screen. Fans of the original will doubtless be pleased, but to be quite honest, it didn't do a great deal for me. Call me a philistine if you like, but I much prefer modern tables with loads of ramps and ball traps, such as the Nightmare table in Pinball Dreams.

In terms of gameplay, Eight Ball Deluxe is difficult to master. It offers you the option of altering the gradient of the table and the strength of the flippers, but even on the easiest setting it's hardly a doddle. The balls have a nasty tendency to fly straight down the side before you've even

managed to touch them with the flippers, which is extremely frustrating. Each game gives you five balls to play with as opposed to the usual three, but considering that I invariably lost at least two of these almost immediately, it didn't make much difference to my score. Other than that, the game is reasonably accurate.

But can someone please tell me why Eight Ball Deluxe has a "free game" feature? This is all very well if you've just spent half an hour pumping fifty pence pieces into an arcade machine and want some return for your investment, but what the hell's the point if you've already spent £35 on the darned thing? I'm all for authenticity, but this is ridiculous.

Techspec

You need a 386SX or better, 256 colour VGA and

DOS 3.3 or higher. 1Mb RAM is required for PC speaker sound, or 2Mb if you're using the Sound Blaster. It will run under Windows 3.1 as a DOS application.

Disk requirements

High density	✓
Hard disk only	✓
Space taken on hard disk	4Mb

Graphic modes

CGA	x	EGA	x	Tandy	x
VGA	✓	SVGA	x		

Soundboards

Ad Lib	x	Roland	x	Sound Blaster	✓
--------	---	--------	---	---------------	---

Control

Joystick	✓	Keyboard	✓	Mouse	x
----------	---	----------	---	-------	---

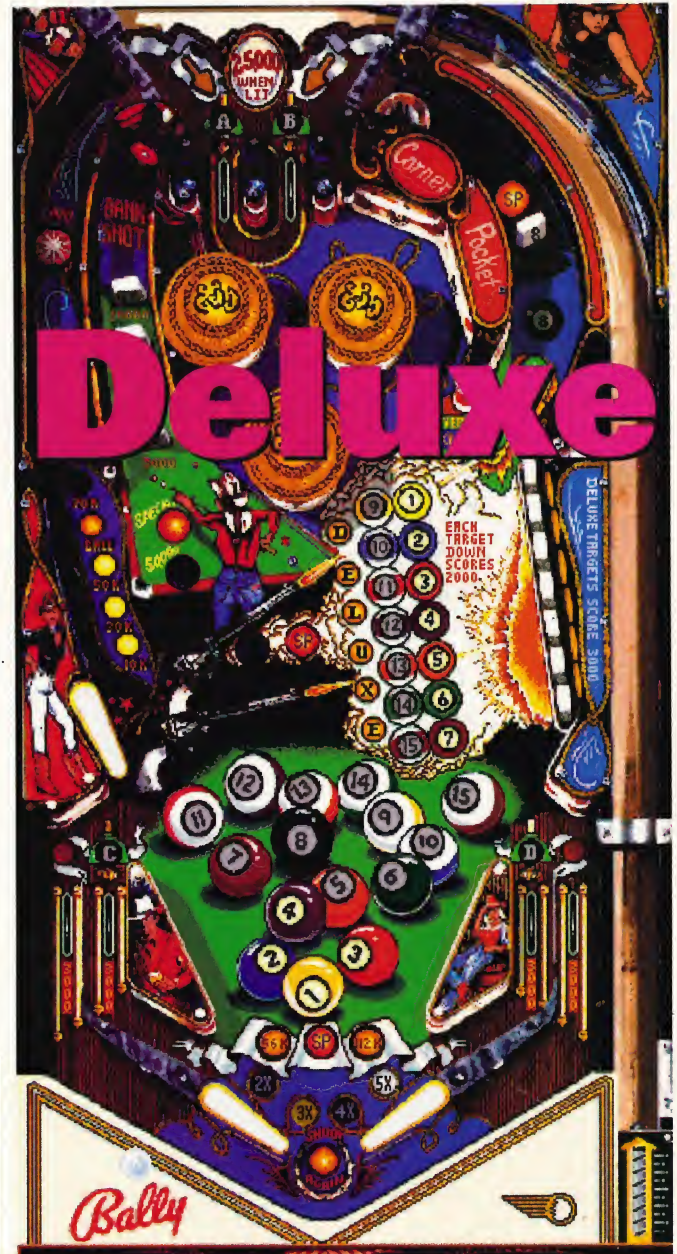
Performance

Optimum speed	20MHz
Minimum memory	1Mb
Free RAM required	575K

Verdict

Reasonable, but not outstanding

rating **5**



The graphics are fairly good, although they have a tendency to look rather cluttered, and there is some flicker on slower machines. Even so, the game plays at a reasonable speed even on a 386SX, so no complaints here.

The overall impression, however, is of a decidedly average game. Eight Ball Deluxe will appeal to those who have played and enjoyed the arcade machine, but its lack of variety and element of frustration do it no favours at all.

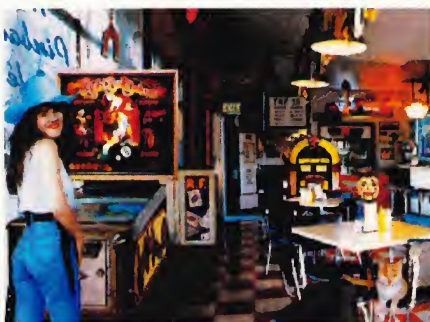
The other drawback is that you only get the one table for your £35, which doesn't strike me as being fantastically good value for money. It doesn't play as well as Pinball Dreams, and, for my money anyway, isn't nearly as enjoyable.

Put it this way: I'll still be playing Dreams long after Eight Ball Deluxe has disappeared from my hard disk.

Lots of targets and flashing lights, but no ramps at all. Shame.

The café is actually a cunningly disguised menu. Click on the back of the pinball machine to change options. Click on the table to play. Click on the girl and you get a smack in the gob.

■ Cal Jones



JOIN THE SQUAD... PLAY THE PC HITS



Push yourself to the limit...

- *50 historic missions from 3 eras
- *Create custom missions and flight aircraft of different eras
- *6 elite fighters to pilot
- *18 enemy aircraft
- *Amateur to expert skill levels

"The graphics are superb..."

One of the best flight sims I have ever played".

PC LEISURE - 5 STARS

"Exquisite - it's got the right stuff... very nice indeed".

ACE - TRAILBLAZER 900

© 1991 ELECTRONIC ARTS.

1 4 . 9 9

WING COMMANDER

The 3-D Space Combat Simulator



ORIGIN

English Version contains
Carte de référence et guide

You're a starfighter pilot, the best of the best,
but nothing in your training prepared you for action this hot.

* See the action from all angles using Wing Commander's player-controlled camera.

* Count on your wingman, a skilled pilot, thanks to the advanced Wing Commander artificial intelligence system, but don't get cocky: the enemy flies intelligently too!

"You ain't seen nothing better..."

super atmosphere...it'll blow your mind".

RAZE - 93%

"One of the finest games of all time".

AMIGA ACTION

© 1990 Origin Systems Inc.

1 4 . 9 9

1 4 . 9 9

1 4 . 9 9

1 4 . 9 9

1 4 . 9 9



Sequel to the award-winning fantasy role-playing game from Mindcraft.

At the other end of the world, far across the sea of Oshmar, lies the dire continent of Gurtex, where the Children of Light are preparing a campaign against the growing Forces of Darkness. But the vile Leaders of Darkness have trapped the lost guardians of the Magic Candle in evil candles of their own.

- * Assign tasks to your companions while you and the rest of your party continue on the adventure.
- * Intelligent conversation with non-player characters who have independent personalities.
- * Automatic mapping and note-taking.

"An excellent example of a true roleplaying game"

-PC REVIEW

© Mindcraft. Produced under license from Electronic Arts Ltd.



It's the Greatest Race Course in the World.

That's why half a million spectators are here. That's why the world's best drivers are here. That's why you're here.

The Experience - At 220+ miles per hour, your car is more aircraft than automobile. Keep all your rubber on the track for a 25 mile sprint or the full 500. The Race - Indy - the most demanding competition in motor sports.

"It's very, very nice".

-ZERO HERO 92%

Game © Electronic Arts Ltd. All Rights Reserved.
Produced under license from Electronic Arts Ltd.



Journey once again to Britannia, land of magic and adventure.

Uncover the mystery of the Gargoyles in this exciting sixth episode of the award-winning ULTIMA saga.

Experience Cinematic Storytelling at its best, with a classically written ULTIMA saga of fantasy and myth, illustrated by leading graphic artists and animators.

Step into a fully interactive world where everything has a purpose - bells ring, clocks tell the time, cannons fire; IF YOU CAN TOUCH IT, YOU CAN USE IT!

- * Stunning full colour graphics and vivid animations.
- * Captivating original music scores.
- * Immediately begin playing and enjoying.
- * Longterm play value - you may never see it all!

"Excellent gameplay,

self-designed".

-PC REVIEW

© Origin Systems Inc.



The only flight simulation to provide 100

complex missions over four intense battle scenarios.

The only flight simulation to provide detailed daily war update reports. The only flight simulation to present the latest in aerodynamic technology introducing ECOP cockpits, backwinder AMS, supercruise, stealth and more! F-29 is that flight simulation.

F-29 Retaliator presents the fastest and most detailed graphic environment ever seen in a flight simulation. You have the choice of two of the world's most advanced aircraft - the F-22 ATF and F-29.

"Exhilarating, thrilling."

-THE ONE - 95%

"Simply the best."

-C&VG - 96%



HIT SQUAD
2 CASTLE STREET · CASTLEFIELD
MANCHESTER · M3 4LZ
TELEPHONE: 061 832 6633
FAX: 061 834 0650

PC SOUND CARDS

3 WITH A **FREE** MICROPHONE FROM SILICA

NEW CARD + LOWER PRICES!

SOUND GALAXY

At last, the first 16-bit STEREO PC Sound Card for under £100! That's just one of the Sound Galaxy range from Silica. The range also includes 8-bit mono and stereo cards with several CD-ROM and sound standard options. And, the BXII and NX PRO EXTRA 16-bit cards, plus the Business Audio 16-bit card from Silica, come with a Dynamic Microphone, worth £7.99+VAT FREE OF CHARGE!

8-bit COMPARISON	MONO	STEREO
No Of Sound Standards	2	3
AdLib	•	•
Sound Blaster Version 2	•	•
Sound Blaster Pro II	•	•
Covox Speech Thing	•	•
Disney Sound Source	•	•
FM SYNTHESIZER - OPL2	•	•
FM SYNTHESIZER - OPL3	•	•
MIDI	•	•
DIGITAL BASS & TREBLE CONTROL	•	•
DIGITAL BASS & TREBLE CONTROL	•	•
SAMPLING RATE, RECORDING UP TO:	23KHz	15KHz
SAMPLING RATE, PLAYBACK UP TO:	44.1KHz	44.1KHz
GAME PORT, WITH MIDI OPTION	•	•
DYNAMIC FILTERING FOR BETTER SOUND	•	•
CD AUDIO IN	•	•
CAN USE MICROPHONE AND CD DURING DIGITAL PLAYBACK	•	•
SMT BOARD FOR BETTER RELIABILITY	•	•
FREE SPEAKERS	•	•
CD-ROM INTERFACE (AT-BUS)	•	•
PANASONIC INTERFACE	•	•
MITSUMI INTERFACE	•	•
SONY INTERFACE	•	•
CD-ROM INTERFACE (SCSI)	•	•
MICROPHONE AGC AMPLIFIER	•	•
STEREO MICROPHONE INPUT	•	•
SOFTWARE SELECTABLE IRQ, DMA & ADDRESS SETTING CONFIGURATION RETAINED WHEN POWER OFF	•	•
MIXER SUPPORT FROM MORE THAN ONE SOURCE DURING RECORDING	•	•
BUILT-IN AMPLIFIER	•	•
STEREO LINES IN AND OUT	•	•

16-bit COMPARISON	STEREO
No Of Sound Standards	6
AdLib	•
Sound Blaster Version 2	•
Sound Blaster Pro II	•
Microsoft Windows Sound System	•
Covox Speech Thing	•
Disney Sound Source	•
FM SYNTHESIZER - OPL3	•
DIGITAL BASS & TREBLE CONTROL	•
DIGITAL BASS & TREBLE CONTROL	•
CD QUALITY SAMPLING RATE, RECORD & PLAYBACK UP TO:	44.1KHz
GAME PORT, WITH MIDI OPTION	•
DYNAMIC FILTERING FOR BETTER SOUND	•
CD AUDIO IN	•
CAN USE MICROPHONE AND CD DURING DIGITAL PLAYBACK	•
CD-ROM INTERFACE (AT-BUS)	•
PANASONIC INTERFACE	•
MITSUMI INTERFACE	•
SONY INTERFACE	•
CD-ROM INTERFACE (SCSI)	•
MICROPHONE AGC AMPLIFIER	•
STEREO MICROPHONE INPUT	•
SOFTWARE SELECTABLE IRQ, DMA & ADDRESS SETTING CONFIGURATION RETAINED WHEN POWER OFF	•
MIXER SUPPORT FROM MORE THAN ONE SOURCE DURING RECORDING	•
OPTION FOR UPGRADE TO 16-bit WAVE-TABLE SYNTHESIS	•
STEREO LINES IN AND OUT	•

ACCESSORIES

- FREE DELIVERY**
- DYNAMIC MICROPHONE**
For recording your own vocal samples or sound effects (this microphone is free from Silica with each Sound Galaxy Card).
SOU 9010 £7.99+VAT = £9.39
- MIDI CABLE**
Connects to the Game Port on the card and provides MIDI IN/OUT as well as an extension for a joystick.
SOU 9016 £9.99+VAT = £11.74
- SONY ADAPTOR**
When connected to the Mitsumi AT-Bus CD-ROM interface on the NX PRO Extra, Business Audio Board or NX PRO 16, it allows connection of the Sony AT-Bus CD-ROM drive.
SOU 9021 £7.99+VAT = £9.39
- SCSI EXTENSION BOARD**
Plugging the Sound Galaxy Extension Board onto the NX PRO Extra, Business Audio Board or NX PRO 16, enables you to connect to a wide range of SCSI CD-ROM drives.
SOU 9028 £29+VAT = £34.08

WAVE POWER

UPGRADE FOR BASIC 16 & NX PRO 16

The WavePower daughterboard option plugs onto the BASIC 16 or NX PRO 16 and turns them into powerful 32 note polyphonic Digital Wave-Table Synthesizers. Ensoniq, the well known manufacturers of professional music equipment, provide the chipsets on WavePower. This allows for the realistic reproduction of various instrument sounds including Marimba, Guitar, Bass, Strings and Special Effects. WavePower is also General MIDI compatible providing the 128 instrument sounds and associated percussion required of the standard. WavePower comes bundled with Midisoft Studio for Windows. This combination provides a powerful tool for you to create your own compositions or to playback MIDI files.

FREE DELIVERY

£99
+VAT = £116.33 SOU 1096

16-bit STEREO



- SOUND GALAXY BUSINESS AUDIO BOARD**
- 16-bit Stereo Sound Card with CD ROM Interface
 - 2 Sound Standards
AdLib, Microsoft Windows Sound System
 - FREE Headphones & Personal Microphone
 - Ideal for the Serious Business User
 - CD-ROM Interfaces (Built-In) For:
Panasonic & Mitsumi Drives - Optional Upgrade to SCSI. Optional Sony Connector (See below).
 - Software Control of Volume, Bass & Treble
 - Built-In Amplifier
 - 6 Software Titles Included
 - FREE Dynamic Microphone from Silica

16-bit STEREO
+ CD ROM INTERFACE

£79
Ref: SOU 1084 +VAT = £92.83

8-bit MONO



- SOUND GALAXY BXII EXTRA**
- 8-bit Mono Sound Card
 - 2 Sound Standards
AdLib, Sound Blaster v.2
 - FREE Speakers
 - Dynamic Filtering:
For Better Sound Reproduction
 - CD Audio In:
Direct Audio Connection from your CD-ROM into the Card
 - Mixer Support:
Recording and Playback from Multiple Sources
 - Built-In Amplifier
 - MIDI Interface
 - 14 Software Titles Included
 - FREE Dynamic Microphone from Silica

8-bit MONO

£49
Ref: SOU 1002 +VAT = £57.58

8-bit STEREO



- SOUND GALAXY NX PRO EXTRA**
- 8-bit Stereo Sound Card with CD ROM Interface
 - 5 Sound Standards
AdLib, Sound Blaster v.2, Sound Blaster Pro II, Covox Speech Thing, Disney Sound Source
 - FREE Speakers
 - CD-ROM Interface (Built-In) For:
Panasonic & Mitsumi Drives - Optional Upgrade to SCSI. Optional Sony Connector (See left).
 - Software Configuration Settings in Eeprom
 - Software Control of Volume, Bass & Treble
 - Built-In Amplifier & MIDI Interface
 - 14 Software Titles Included
 - FREE Dynamic Microphone from Silica

8-bit STEREO
+ CD ROM INTERFACE

£79
Ref: SOU 1050 +VAT = £92.83

16-bit STEREO



- SOUND GALAXY BASIC 16**
- 16-bit Stereo Sound Card with CD ROM Interface
 - 6 Sound Standards
AdLib, Sound Blaster v.2, Sound Blaster Pro II, MS Windows Sound System, Covox Speech Thing, Disney Sound Source
 - FREE Headphones
 - CD-ROM Interfaces (Built-In) For:
Panasonic & Mitsumi Drives. Optional Sony Connector (See above).
 - Software Configuration Settings in Eeprom:
Card Doesn't Reset on 'Power-Off'
 - Software Control of Volume, Bass & Treble
 - Built-In Amplifier & MIDI Interface
 - 14 Software Titles Included + Utilities and Drivers
 - Wave Power Upgrade (See above)

16-bit STEREO
+ CD ROM INTERFACE

£99
Ref: SOU 1056 +VAT = £116.33

16-bit STEREO



- SOUND GALAXY NX PRO 16**
- 16-bit Stereo Sound Card with CD ROM Interface
 - 6 Sound Standards
AdLib, Sound Blaster v.2, Sound Blaster Pro II, MS Windows Sound System, Covox Speech Thing, Disney Sound Source
 - FREE Headphones & Personal Microphone
 - CD-ROM Interfaces (Built-In) For:
Panasonic & Mitsumi Drives - Optional Upgrade to SCSI. Optional Sony Connector (See above).
 - Software Configuration Settings in Eeprom:
Card Doesn't Reset on 'Power-Off'
 - Software Control of Volume, Bass & Treble
 - Built-In Amplifier & MIDI Interface
 - 9 Software Titles (inc HSC Interactive) Included
 - Wave Power Upgrade (see above)

16-bit STEREO
+ CD ROM INTERFACE

£129
Ref: SOU 1062 +VAT = £151.58



SILICA OFFER YOU

Before you decide when to buy your new PC peripherals, we suggest you think very carefully about **WHERE** you buy them. Consider what it will be like a few months after you have made your purchase, when you may require additional products, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the 'Silica Service'.

- **FREE OVERNIGHT DELIVERY:**
On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:**
A team of technical experts will be at your service.
- **PRICE MATCH:**
We match competitors on a 'Same product - Same price' basis.
- **ESTABLISHED 15 YEARS:**
We have a proven track record in professional computer sales.
- **PART OF A £50M COMPANY (with over 200 staff):**
We are solid, reliable and profitable.
- **BUSINESS + EDUCATION + GOVERNMENT:**
Volume discounts are available. Tel: 081-308 8888.

- **SHOWROOMS:**
We have demonstration and training facilities at all our stores.
- **THE FULL STOCK RANGE:**
All of your requirements are available from one supplier.
- **FREE CATALOGUES:**
Will be mailed to you with special offers and full details of hardware, peripherals and software.
- **PAYMENT:**
We accept most major credit cards, cash, cheque or monthly terms (APR 29.9% - written quotes on request).



HOT LINE 081-309 1111

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening
Tel: 081-309 1111 Fax No: 081-308 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA
Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening
Tel: 071-580 4000 Fax No: 071-323 4737

LONDON SHOP: Selfridges (Basement Area), Oxford Street, London, W1A 1AB
Opening Hours: Mon-Sat 9.30am-7.00pm Late Night: Thursday - 8pm
Tel: 071-629 1234 Extension: 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday - 7pm
Tel: 081-302 8811 Fax No: 081-309 0017

ESSEX SHOP: Keddies (2nd Floor), High Street, Southend-on-Sea, Essex, SS1 1LA
Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 7pm
Tel: 0702 468039 Fax No: 0702 468039

IPSWICH SHOP: Debenhams (2nd Floor), Waterloo House, Westgate St, Ipswich, IP1 3EH
Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 8pm
Tel: 0473 287092 Fax No: 0473 287092

To: Silica, PCR/VW-1293-110, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON PC SOUND CARDS

Mr/Mrs/Miss/Ms: Initials: Surname:

Company Name (if applicable):

Address:

Postcode:

Tel (Home): Tel (Work):

Which computer(s), if any, do you own? 110E

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

THE BEST SELLING FLIGHT SIMULATOR IN EUROPE JUST GOT BETTER

BOX CONTAINS:

- Pilot's manual
- Reference manual
- 4 High altitude charts
- 2 ILS approach charts
— 740 Airports
- 1 A320 USA poster

...has landed.

A320[®] AIRBUS[®]



Lufthansa

Developed in cooperation with

and Deutsche Aerospace Airbus

Available from:

Centresoft — 021 625 3388 • Columbus — 0457 860300

Leisuresoft — 0604 768711 • SDL — 081 309 5000

Available on:

Amiga, Atari ST, Falcon, IBM PC & compatibles

Price:

Amiga & Atari ST — £35.99 • PC — £45.99

THALION Ltd, 120 Anderton Park Road, Moseley, Birmingham, England B13 9DQ

Tel: 021 442 2050 • Fax: 021 442 2050

OUT NOW!

CD-ROM reviews

The latest CD games – both 'enhanced' versions and originals – are put through their paces

Title	Gobliins/Gobliins 2
Publisher	Coktel Vision
Contact	(0276) 684959
Price	£44.99 each

Gobliins/Gobliins 2

Gobliins and Gobliins 2 are a pair of wacky, cartoon-style puzzle games from Coktel Vision. The basic idea behind the games is to solve a series of increasingly bizarre problems using each character's specific skills (in Gobliins you have three of the little imps to control; Gobliins 2 has, well, two).

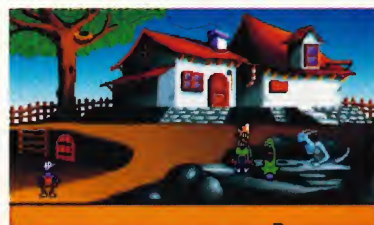
The humour is excellent, but the problems are extremely difficult to solve. How would you get past a giant, for example? You need to distract him with some food. You have a sausage in your inventory, but that's not enough. What you actually have to do is find a chicken, pick it up by the neck and bludgeon it over the head with the sausage to get it to lay an egg. Weird.

Both games are incredibly quirky, and will not exactly suit everyone. However, I found them intriguing and original and this more than made up for their shortcomings.

The main advantage of buying Gobliins and Gobliins 2 on CD-ROM is the extra sound. The comic

sound effects tie in perfectly with the slapstick humour, and it's almost worth getting just to hear the little chaps muttering in their own special language. Beyond that, there's very little difference between the CD and floppy versions. If you've already played the two games on floppy disk, it's probably worth waiting for Gobliins 3 instead.

■ Cal Jones



There are surprises around every corner.

Techspec

Both games require a 286 minimum.

VGA and Microsoft compatible mouse.

Graphic modes

VGA ✓ SVGA ✗

Soundboards

Ad Lib ✓ Roland ✗ Sound Blaster ✓

Control

Joystick ✗ Keyboard ✗ Mouse ✓

Performance

Optimum speed	16MHz
Minimum memory	640K
Free RAM required	580K

Verdict

Quirky, infuriating and fun

rating 7

Title	Dracula Unleashed
Publisher	Mindscape
Contact	(0444) 246333
Price	£49.99

Dracula Unleashed

If you're familiar with Icom's Sherlock Holmes Consulting Detective series, Dracula Unleashed will come as nothing of a surprise.

You play Alexander Morris, who has come to London to investigate his brother's mysterious stabbing.

The mechanics of the game are simple. You begin the game with a scant list of locations which you can visit to learn more about the story. At each one you are shown a video clip that advances the story and gives you access to an object or a new location. Once a new location is discovered, it is added to the list of places you can visit.

Alexander is a meticulous diary freak and anything vaguely interesting is recorded in the diary. Between locations and clips you can re-read the diary, examine and use objects and pass the time.

Of course, the title gives away the gist of the story and before you know it there are newspaper reports of headless bodies drained of blood, dry ice and spooky graveyards. Visual as well as verbal clichés abound because there's a vampire at large in London and you're the hero who is going to stop him ...

Dracula Unleashed describes itself as an "interactive horror movie" but while it *does* feature some interaction, it is far from being a movie. The quality of the video is remark-

ably good, but there is some dreadful acting by Americans trained at the Dick Van Dyke Academy of Exaggerated Cockney Accents.

There's precious little gameplay underneath and when the wow factor has worn off, you're not left with much of a game for your money.

■ Dean Evans



Techspec

Requires a 386 or better, VGA and a compatible sound card. Runs direct from the CD.

Graphic modes

VGA ✓ SVGA ✓

Soundboards

Ad Lib ✓ Roland ✓ Sound Blaster ✓

Control

Joystick ✗ Keyboard ✗ Mouse ✓

Performance

Optimum speed	33MHz
Minimum memory	2Mb
Free RAM required	600K

Verdict

Nice video but shallow gameplay

rating 6



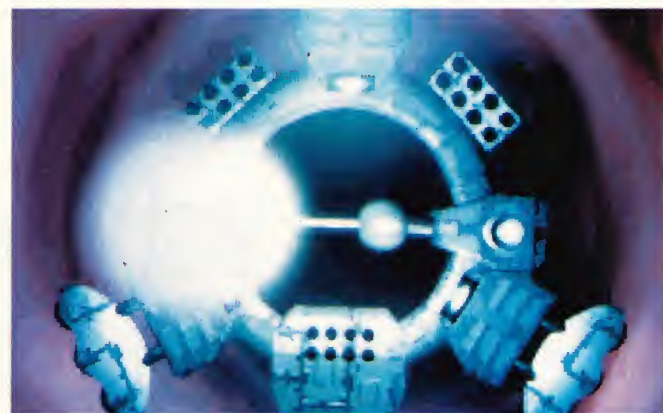
Gobliins 2 has lots of humour ... just don't tell the RSPCA.



WIN *Microcosm!* Gold CD-ROM

To celebrate Psygnosis's forthcoming game, *Microcosm*, we're giving away a fully playable gold CD-ROM which has been signed by the development team. The only way to get hold of this unique prize is to win our exclusive competition, so get writing! Ten lucky runners up will receive the game of their choice from the following Psygnosis titles: *Dracula*, *Lemmings* (the original), *Creepers*, *Armour-Geddon*, *Dungeon Master* and *Spear of Destiny*.

Psygnosis, the company which inflicted *Lemmings* on an unsuspecting public, has joined the CD revolution by releasing a stunning new game in which you pilot a microscopic craft through the human body. With over 500Mb of graphics and sound data, full colour VGA graphics and an original soundtrack by Rick Wakeman, it's guaranteed to knock your socks off.



How to enter

Just answer the questions on the form supplied and stick the completed coupon on the back of a postcard or sealed envelope. Send your entry to Microcompo, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

Microcompo

The answers are as follows:

- 1.....
- 2.....
- 3.....

Please state which game you'd prefer if you win one of the runners-up prizes (see above for list):

.....

Name.....

Address.....

☐ Tick this box if you do NOT want to receive any further information from companies associated with this competition.

Questions

1. Which one of these films is NOT about journeying through the human body in a miniaturised ship?
a Fantastic Voyage
b Incredible Journey
c Innerspace
2. Where in the body would you find a cardiac sphincter?
a Heart
b Bladder
c Stomach
3. Which of the following games is NOT a Psygnosis product?
a Obitus
b Troddlers
c Bram Stoker's Dracula

The closing date is December 15th, 1993.

Rules

- Prize winners will be selected after the closing date.
- Entries received after the closing date won't be considered.
- Only ONE entry per person, please.
- Employees of EMAP Images or Psygnosis are not eligible to enter.
- The editor's decision in all these matters is final.

L&G COMPUTER SUPPLIES

**23 WATERSIDE
THE LANDINGS
GODALMING
SURREY
GU7 1J3**

**For all your PC
Hardware and
PC Games
Please Call
0483 426442**

SOUND *sense*

BCC DISTRIBUTION Tel: 0282 31108 or 0282 34772

BUDGET reviews

You don't have to spend over £40 on a game. The games below all sell for less than £15, and some of them, at least, are pretty good



CJ's Elephant Antics **Codemasters** **£9.99**

This may be just another platform game but it's actually great fun and well worth the price. Somewhere over France, an aeroplane carrying CJ the elephant to a zoo in England hits turbulence and CJ's cage breaks open.

He escapes out of the plane with an umbrella and begins the journey back to his family in Africa.

At the end of each level CJ must defeat a boss such as the hunchback, and along his travels he will have to destroy frogs, snails, clouds and policemen.

He can jump using his umbrella which will break his fall and he also has the ability to fire peanuts from his trunk or throw bombs. Eating things such as cakes and bananas will help him keep in top condition and some foes do contain invincibility pills which will keep immune from anything for a while.

The graphics are clearly defined and the sound is of a good quality throughout. I would, however, recommend using the keyboard rather than a joystick, because you'll probably find it gives you more control. In addition to this, you can switch between fast, slow or normal speed to run the game to suit your reflexes, or lack of them.



Kwick Snax **Codemasters** **£9.99**

You play Dizzy, a sort of hyperactive egg, and with your Yolkfolk band you decide to go on holiday after a long hard tour.

After an argument the evil wizard Zaks sends your friends to different lands, such as Ice-land and Cloud-land and inevitably your task is to rescue them. The game is divided into four levels and you can choose which destination to begin the game with.



The play owes quite a bit to the veteran Pacman, as you crush your enemies by pushing ice blocks, skulls and other things on them, depending on what level you are on.

You build up points by collecting fruit, but you have to plan your moves well because once Dizzy starts in a direction, he is unable to stop until he hits something. Indeed, it's all too easy to lose control of him, whereupon he will go wandering off in quite the wrong direction, which tends to mean 'game over' more often than not.

The sound and graphics are satisfactory, without blowing anyone's mind, and while it's not the greatest budget game ever produced, you could happily while away a couple of hours with it.



The Magic Candle II **Hit Squad** **£14.99**

The Magic Candle series has something of a cult following among those who like their role-playing games heavy, complex and layered at the expense of polish and presentation — and, let's face it, ease of use. There's a vast range of options, hordes of characters (31, actually) available to join your party, sub-quests, special skills for the computer characters which need careful manipulation, and puzzles and combat galore.

But it really is one for the purists: the more dilettante among us would question whether there's anything particularly exciting or interesting in the way the whole thing is put together.



World Class Rugby **Audiogenic** **£14.99**

I'm sorry to say this but this is no great shakes as a rugby simulation. The gameplay, sound and graphics are poor to average and the control system is unreliable, to say the least.

However, this is not to say that the game doesn't have its moments. One of the better things about this game, is the fact that you can

choose from all of the world cup teams and the five home nation teams. During the game rules such as offside and penalties are given which gives the game some pretence to authenticity. And it is possible to have some fun — albeit short-lived — with it.

World Class Rugby has one other thing in its favour: it's not International Rugby Challenge.



Hook **Hit Squad** **£12.99**

This is the game of the film in which where Peter Pan (now grown up), has to rescue his kids who have been kidnapped by Captain Hook.

One of the main hurdles you have to overcome is to get on board Hook's ship. You have to travel around town talking to pirates, shopkeepers and innkeepers to find a pirate's uniform that will get you on board the ship.

The game play is quite easy and the graphics are smooth and clear, but the whole thing gets repetitive after a while and although there is some welcome humour (such as trying to steal the old woman's clothes), I doubt Hook will maintain your interest.



Chuck Yeager's Air **Combat** **Hit Squad** **£14.99**

This veteran flight simulator is a welcome budget release and worth



every penny of the asking price. It may not have the heavyweight set of controls and options of modern flight sims, but it's easy to handle, the response is excellent and it's a dream to play. This is topped off with some effective sounds from your bullets, missiles and after-burners, and the detail in the landscape and aircraft graphics. The movement on the screen is smooth and clear and it is far easier to use the joystick rather than use the mouse or keys.

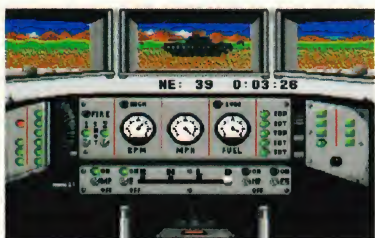
It also has the added attraction of some genial advice from Chuck Yeager himself; he'll let you know if you're stalling, or if you need to fire flares at oncoming missiles. In addition, you can make each mission easy or difficult and little cheats such as unlimited ammo and invincibility will really help. Furthermore, you can create your own missions, rather than the supplied World War II, Korean War or Vietnam War scenarios.



Steel Thunder Hit Squad £12.99

Tank simulations have a reputation for being dull, but Steel Thunder is quite enjoyable once you get the hang of it.

You can be fussy and choose your crew and tank but if you can't wait, you can go straight into a mission. You have a choice of 24 missions set in three countries: Cuba, West Germany and Syria. Once on a mission you can be the gunner, driver or the commander. If you choose the gunner you do at least have the



pleasure of blowing up the other tanks and buildings yourself. Don't be too trigger-happy because ammo runs out quite quickly and you have to have a steady hand and good reflexes.

Overall, this is a well-designed game but its graphic and audio presentation don't do it any favours: more mid-80s standard than early 90s. But Steel Thunder shouldn't be dismissed out of hand.



Blue Angels Hit Squad £12.99

Another flight simulator, but this one is with a difference. You are part of an air display team and apart from practising stunts with other aircrafts at the end of it you should be able to put on a show. Stunt Island it isn't, but it's fun all the same.

Some of the moves, however, are quite difficult so it is wise to train in the flight simulator or practise at a slow speed before increasing the pace. The game teaches you how to do the moves with the arrow keys, explained on the left hand side of the screen when you



are in flight sim mode. The most enjoyable part of the game is probably the free flight section, where you get to fling the plane around the sky exactly as you want.

The graphics and sound are not up to the standard of Chuck Yeager's Air Combat, but the game is a lot more difficult to master especially when you're flying in a formation team. If you're fed up with going on dangerous missions, loves performing and does not mind being at a flight simulation game for hours, this game could well be for you.



Links: The Challenge of Golf Kixx XL £16.99

Links is one of the all-time classics. Created by Access, which cut its teeth with the Atari ST and Amiga Leaderboard series, it has now been superseded by Links Pro in the full-price stakes, but in its day Links set new standards in graphic realism on the PC.

It still offers outstanding terrain detail, accurate course modelling and first rate animation of the golfer, and the sheer variety and detail of the trees, buildings, and bunkers will put most full-priced golf games to shame. Sound effects such as birds chirping, the ball hitting the trees, a nice meaty 'thwack' as you driver makes contact with the ball and constant commentary bring the game even further to life.

But what really makes Links a cut above the rest are the options open to the player. You can make infinitesimal adjustments to your stance and swing, as well as decide which club to play and the type of shot to use. Fortunately this doesn't make it a difficult game to play, though, and the control system is essentially very simple. Another good thing about the game is you do not have to be master to play it, you have three levels of gameplay: pro, amateur and beginner.

Highly recommended for anyone looking for an introduction to PC golf, or those with 286 machines which won't run Links Pro.

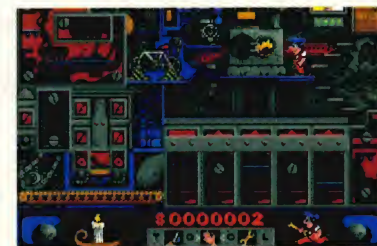


Night Shift Kixx XL £12.99

One of the forgotten programs from the LucasArts catalogue, Night Shift is something of a curiosity: nothing to do with SCUMM, or Monkey Island, but a platform cum

puzzle game which tests the reflexes and teases the brain.

You are a new employee in a toy factory and you have to keep the machine called the beast in working order. You have to meet your quota each night or you will be fired. It takes a while to get the hang of the controls, and even when you do, you'll find Night Shift is hardly easy.



The graphics are intricate and clearly detailed, and if the entertainment isn't particularly long-lasting, it's refreshing different to many full-price games on the market today. Indeed, it would almost be worth buying for its novelty value alone.



REVIEWED THIS MONTH

CJ's Elephant Antics

★★★★

Kwick Snax

★★★★

Magic Candle II

★★

World Class Rugby

★★

Hook

★★

Chuck Yeager's Air Combat

★★★★★

Steel Thunder

★★

Blue Angels

★★★★

Links: Challenge of Golf

★★★★★

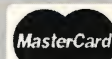
Night Shift

★★★



ComputerMate

The Wheel, Robin Way, Cuffley, Hertfordshire EN6 4QB
Tel: (0707) 875757 Fax: (0707) 875513



Mon - Fri 8am - 8pm
Sat 9am - 7pm

THE LEISURE ZONE

4D BOXING	£19.99
4D SPORTS DRIVING	£19.99
A TRAIN	£26.99
ARCHIE MACLEAN'S POOL	£30.99
AIR LAND, SPACE/MIG29, 4D Sports Drivin' Star Glider 2)	£29.99
ALONE IN THE DARK	£34.99
ALONE IN THE DARK II	£34.99
ARNHEM, ANCIENT BATTLES, VULCAN	£24.99
BATTLECHESS 1	£10.99
BATTLE ISLE (Data Disk + Scenario Editor)	£26.99
BATTLE ISLE '93	£22.99
BETRAYAL AT KRONDOR	£34.99
BITMAP COLLECTION (Xenon, Speed Ball 2, Cadaver)	£26.99
BLADE OF DESTINY	£34.99
BLUES BROS	£10.99
CARRIERS AT WAR	£34.99
CARRIERS AT WAR CONSTRUCTION KIT	£34.99
CHESS MANIAC 5 BILLION AND 1	£36.99
CHESSMASTER 2100	£19.99
CHESSMASTER 3000 (DOS)	EACH £29.99
CHESSMASTER 4000 (WINDOWS)	£29.99
CIVILISATION	£34.99
COMPLETE CHESS SYSTEM II (35K)	£34.99
CYBERACE	£36.99
DAY OF THE TENTACLE	£36.99
DUNE	£29.99
DUNE 2	£30.99
DYNABLASTERS	£19.99
ELDER SCROLLS	£34.99
ELITE II THE FRONTIER	£34.99
ELITE PLUS	£19.99
EPIC	£22.99
EYE OF THE BEHOLDER I	£26.99
EYE OF THE BEHOLDER II	£29.99
EYE OF THE BEHOLDER III (Assault on Myth Dronmor)	£34.99
FIELDS OF GLORY	£36.99
FLASHBACK	£32.99
FORGOTTEN CASTLE	£37.99
FREDDY PHARKUS	£34.99
FRONT PAGE SPORTS FOOTBALL PRO (US)	£34.99
GARDENERS WORLD	£19.99
GOAL	£29.99
GRAND PRIX (Formula 1 Inc Editor)	£36.99
GRAND PRIX UNLIMITED	£26.99
GREAT NAVAL BATTLES	£34.99
ATLANTIC SUPER SHIPS	£15.99
AMERICA IN THE ATLANTIC	£15.99
SCENARIO BUILDER	£15.99
HARPOON 1.3	£34.99
HARPOON II	£37.99
HARPOON DESIGNER SERIES	£17.99
HARPOON DESIGNER SERIES II	£21.99
HARPOON BATTLESETS 3 & 4	EACH £13.99
HARPOON SCENARIO EDITOR	£15.99
HISTORY LINE 1914-1918	£34.99
HOYLES CLASSIC	£34.99
INCREDIBLE MACHINE	£34.99
INDIANA JONES FATE OF ATLANTIS	£29.99
INDY CAR RACING	£30.99
10 INTELLIGENT STRATEGY GAMES (Backgammon, Bridge, Chess, Drafts Go & 5 others)	£29.99
JIMMY WHITE'S SNOOKER	£24.99
JORDAN IN FLIGHT	£34.99
JURASSIC PARK	£29.99
KASPAROV'S GAMBIT	£37.99
KINGS QUEST 1	£34.99
KINGS QUEST 2	£34.99
KINGS QUEST 3	£34.99
KINGS QUEST 4	£34.99
KINGS QUEST 5	£34.99
KINGS QUEST 6	£34.99
KRISIS IN THE KREMLIN	£26.99
LANDS OF LORE	£32.99
LAURA BOW II	£34.99
LEATHER GODDESSES II	£26.99
LEGEND OF VALOUR	£34.99
LEISURE SUIT LARRY 5	£34.99
LEMMINGS DUAL PACK	£24.99
LEMMINGS II (the Tribe)	£24.99
LOST TREASURE OF INFOCOM 1 (20 GAMES)	£29.99
LOST TREASURE OF INFOCOM 2 (12 GAMES)	£24.99
LOST WIKINGS	£29.99
M1 TANK PLATOON	£14.99
MICROSOFT ARCADE (ASTERIODS, BATTLE??? & 3 OTHERS)	£19.99
MICROSOFT ENTERTAINMENT PACK WINDOWS 1, 2, 3&4	EACH £19.99
MONKEY ISLAND 2 (Le Chucks Revenge)	£29.99
MONOPOLY (UK)	£27.99

NAPOLEONICS (Austerlitz, Boodino, Waterloo)	£29.99
NFL COACHES CLUB FOOTBALL	£36.99
NHL HOCKEY	£36.99
OMEGA SHARP'S BRIDGE (DOS Or Windows)	EACH £34.99
PACIFIC WAR	£34.99
PATRIOT	£39.99
PINBALL (8 BALL DELUXE)	£29.99
PINBALL DREAMS	£32.99
PIRATES GOLD	£36.99
POLICE QUEST 3	£34.99
POLICE QUEST 4	£34.99
PREMIERE MANAGER	£22.99
PRINCE OF PERSIA	£12.99
PRIVATEER	£42.99
SPEECH ACCESSORY PACK	£17.99
PRO TENNIS TOUR 2	£19.99
QUEST FOR GLORY (Trial by Fire)	£29.99
QUEST FOR GLORY 3 (wages of war)	£34.99
RAILROAD TYCOON	£16.99
RAILROAD TYCOON DELUXE	£36.99
RALLY	£34.99
REALMS	£22.99
RETURN TO ZORK	£39.99
REX NEBULAR	£36.99
ROBOSPORTS (Windows)	£26.99
SAM & MAX HIT THE ROAD	£36.99
SCRABBLE DELUXE (CGA/EGA)	£17.99
SCRABBLE (VGA)	£26.99
SEAL TEAM	£34.99
SEA WOLF SSN 21	£44.99
SENSIBLE SOCCER	£26.99
SHADOW CASTER	£37.99
SHANGHAI II MAH JONG	£26.99
SILENT SERVICE 2	£16.99
SIM CITY/POPULOUS (Twin Pack)	£26.99
SIM CITY (Windows)	£36.99
SIM EARTH (Windows)	£34.99
SIM FARM	£29.99
SIMON THE SORCEROR	£34.99
SPACE HULK	£36.99
SPACE QUEST 1-4	£34.99
SPACE QUEST 5	£34.99
SPELLCASTING 201 (SORCERORS APPLIANCE)	£22.99
STAR GLIDER 2 (EGA ONLY)	£9.99
STAR LORD	£36.99
STAR TREK 25TH ANNIVERSARY	£26.99
STREETFIGHTER 2	£26.99
STRIKER	£26.99
STUNT ISLAND	£44.99
SUB WARS 2050	£36.99
SUPER TETRIS	£19.99
SYNDICATE	£37.99
TASK FORCE 1942	£36.99
TEAM YANKEE	£19.99
THE GAMES (Español '92)	£26.99
TIMES CROSSWORD (120)	£14.99
TRIVIAL PURSUIT (CGA/EGA)	£9.99
TRIVIAL PURSUIT DELUXE	£26.99
TV SPORTS BASEBALL	£14.99
TV SPORTS BOXING	£14.99
ULTIMA 7 II (Serpent Isle)	£36.99
ULTIMA 8 PAGAN	TBA
ULTIMA UNDERWORLD 2 (Labyrinth of Worlds)	£34.99
V FOR VICTORY 1 (UTAH BEACH)	£29.99
V FOR VICTORY 2 (VERLUKE LUKE)	£29.99
V FOR VICTORY 3 (MARKET GARDEN)	£27.99
V FOR VICTORY 4 (GOLD, JANS, SWORD)	£34.99
VEIL OF DARKNESS	£29.99
VICTORY AT SEA	£37.99
X WING B WING	£17.99
WAR IN RUSSIA	£37.99
WING COMMANDER 1 SECRET MISSIONS 1 & 2	£17.99
WING COMMANDER 2 + SPEECH ACCESSORY PACK	£34.99
SPECIAL OPERATIONS 1 & 2	£21.99
WINTER CHALLENGE	£22.99
WIZARDRY 7 (Crusaders of The Dark Savant)	£39.99
WWF	£14.99
X - WING	£37.99
MISSION DISK	£17.99
B WING	£17.99
ZOO	£22.99
ZORK 1, 2	EACH £9.99

TECH SUPPORT MOUSEMAT
ON ALL ORDERS OVER £35

FREE NEW CATALOGUE
NOW AVAILABLE

The Hangar

A 320 AIRBUS	£39.99
A320 AIR BUS (US EDITION)	£39.99
ACES OF THE PACIFIC + WW2 1946 MISSION DISK	£39.99
ACES OVER EUROPE	£34.99
AIR COMBAT CLASSICS (Battle of Britain Battlehawks, S.W.O.T.I.)	£39.99
AIRLINE TRANSPORT PILOT (Version 2)	£34.99
AIRLINE TRANSPORT PILOT UPGRADE	£9.99
AIR TRAFFIC CONTROL	£39.99
ANCIENT WAR OF WAR IN THE SKY	£34.99
B17 FLYING FORTRESS (Version 2)	£26.99
BATTLE OF BRITAIN (FINEST HOUR)	£26.99
MISSION DISK	£14.99
DOGFIGHT	£36.99
EVASIVE ACTION	TBA
F15 III	£36.99
F19 STEALTH / MIG 29 FULCRUM DUAL PACK	£39.99
FALCON 3 (Ver D)	£29.99
FIGHTING TIGERS MISSION DISK	£21.99
MIG 29 ADD-ON	£21.99
FLIGHT SIMULATOR 5	£39.99
PARIS & NEW YORK SCENERY	EACH £17.99
SAN FRANCISCO/WASHINGTON (MALLARD)	EACH £29.99
FLIGHT SIMULATOR 4	£39.99
AIRCRAFT & ADVENTURE FACTORY	£29.99
911 AIR RESCUE FLIGHT 685/701	EACH £19.99
AIRCRAFT & FACILITY DIRECTOR	£19.99
AIRCRAFT & SCENERY DESIGNER	£29.99
FS PRO	£19.99
GRAPHICS & SOUND UPGRADE 1.5	£19.99
NEW FACILITIES LOCATOR	£17.99
PILOT'S POWER TOOLS (INC FLIGHT PLANNER)	£29.99

SCENERY ENHANCEMENT EDITOR	£19.99
SCENERY DISKS	
CALIFORNIA COLLECTION	£34.99
EUROPE, HAWAII, JAPAN (SUBLOGIC)	EACH £14.99
EXOTIC ISLANDS	£19.99
GRAND CANYON, HAWAII, TAHITI (MALLARD)	EACH £15.99
GREAT BRITAIN 3 DISK SET	£34.99
ITALY	£36.99
NORTHERN ENGLAND	£29.99
QUICKSCENE MEMORY MANAGER	£14.99
SOUTH EAST/ SOUTH WEST ENGLAND	EACH £29.99
US SCENERY EAST/WEST	EACH £39.99
NE FRANCE/PARIS /UK/GERMANY	EACH £19.99
GUNSHIP 2000	£32.99
ICE & ISLANDS MISSION DISK 1	£21.99
HARRIER JUMP JET	£36.99
MAXIMUM OVERKILL (Comanche)	£39.99
MISSION DISK 1	£21.99
MISSION DISK 2	£21.99
MEGAFORTRESS	£19.99
PACIFIC STRIKE	£42.99
RED BARON & MISSION DISK	£39.99
SECRET WEAPONS OF THE LUFTWAFFE	£34.99
(He 162, P80, P38, Do 335)	EACH £15.99
STRIKE COMMANDER	£44.99
SPEECH ACCESSORY PACK	£17.99
SPECIAL OPS 1	£17.99
T.F.X.	£36.99
TORNADO	£36.99
DESERT STORM MISSION DISK	£32.99
TRACON 2 (DOS)	£34.99

The Golf Club

DAVID LEADBETTER'S GOLF	£26.99
LINKS	£14.99
COURSES- BAYHILL, BOUNTIFUL, BARTON CREEK, DORADO, FIRESTONE, ...	
NORTH TROON	EACH £19.99
LINKS PRO 386 (386/486SVGA ONLY)	£39.99
COURSES-BANFF, FIRESTONE, INNISBROOK, KAMPALLA, MAUNA KEA, PEBBLE BEACH	
PINEHURST 2 ST ANDREWS, THE BELFRY	EACH £20.99
PGA TOUR PLUS COURSES	£24.99

The Office

AFTER DARK	£36.99
AUTO ROUTE EXPRESS	£89.99
DELUXE ANIMATION	£89.99
DESIGN WORKS	£159.99
DELUXE PAINT ENHANCED V.24	£89.99
DR SOLOMON'S ANTI VIRUS	£42.99
EXPRESS PUBLISHER	£117.99
FRENCH ASSISTANT	£89.99
GERMAN ASSISTANT	£89.99
MAVIS BEACON 2 DOS & WINDOWS	EACH £29.99
MINI OFFICE PERSONAL XT/AT	£19.99
M. SCOTTWORKS DOS & WINDOWS	EACH £119.99
MS DOS 6.0 UPGRADE (Until 30/12/93)	£57.99
PRINTSHOP DELUXE	£44.99
QEMM 386 V6 (Inc. Aces of Pacific & Front Page Sports Football)	£79.99
QUICKEN DOS	£49.99
QUICKEN WINDOWS	£59.99
QUICK INVOICE	£39.99
SCREEN CRAZE	£29.99
STAR TREK (SCREEN SAVER)	£36.99
TIMEWORKS PUBLISHER 3	£149.99
VISTAPRO	£89.99
WINDOWS 3.1 UPGRADE	£49.99
WINDOWS 3.1 & MOUSE	£64.99

The Classroom

BODYWORKS	£49.99
CASTLE OF DR BRAIN	£29.99
CHEMISTRY WORKS	£49.99
DISTANT SUNS	£69.99
FRENCH MISTRESS	£18.99
FUN SCHOOL 3 (Under 5, 5-7, 7+)	EACH £22.99
FUN SCHOOL 4 (Under 5, 5-7, 7-11)	EACH £22.99
GERMAN MASTER	£18.99
HENRIETTA'S BOOK OF SPELLS (VGA)	£29.99
HOORAY FOR HENRIETTA (Maths VGA)	£29.99
ITALIAN TUTOR	£18.99
MEGA MATHS	£22.99
MICRO ENGLISH	£22.99
MICRO FRENCH	£22.99
MICRO MATHS	£22.99
MICRO SPANISH	£22.99
MIXED UP FAIRY TALES	£24.99
ORBITS	£49.99
PC GLOBE V.6	£39.99
SPANISH TUTOR	£18.99
SPELLBOUND	£29.99

The Hardware Store

ADVANCED GRAVIS JOYSTICK	£34.99
ADVANCED GRAVIS PRO JOYSTICK	£49.99
ANALOGIC TO DIGITAL JOYSTICK ADAPTOR	£19.99
CH FLIGHT STICK	£39.99
DIGITAL JOYSTICK	£10.99
GRAVIS GAMES PAD	£22.99
GRAVIS ULTRASOUND 16 bit CARD	£184.99
GALAXY NX II SOUND CARD (Inc Speakers)	£99.99
GALAXY NX PRO CARD (Inc Speakers)	£129.99
JOYSTICK "Y" CONNECTOR	£9.99
PC SERIAL MOUSE	£19.99
QUICKSHOTWARRIOR JOYSTICK	£11.99
QUICKSHOT SOUND PACK (SoundBlaster, Warrior Joystick & Speakers	
+3 GAMES	£99.99
SAITEK ARCADE DIGITAL JOYSTICK	£8.99
SAITEK MEGAGRIP ANALOG JOYSTICK	£14.99
SMART CARD (8-80MHZ)	£17.99
SOUND MATE SPEAKERS	£17.99
THRUSTMASTER JOYSTICK	£79.99
THRUSTMASTER WEAPONS CONTROL SYSTEM	£104.99
VIRTUAL PILOT	£84.99

The CD Player

360 COMPILATION (Inc. Knights of the Sky, Megalotress Das Boot)	£29.99
7TH GUEST	£59.99
BRITANNICA FAMILY CHOICE	£59.99
CALIFORNIA/HAWAII GOLF GUIDE (INC. LINKS)	£29.99
CHESSMASTER 3000 (MULTIMEDIA)	£39.99
COMPTON'S INTERACTIVE ENCYCLOPEDIA	£299.99
DUNE	£44.99
GUINNESS DISK OF RECORDS 1993	£59.99
KINGS QUEST 5	£39.99
KODAK CD ACCESS	£29.99
INDIANA JONES AND THE FATE OF ATLANTIS	£39.99
IRON HELIX	TBA
LAURA BOW 2	£39.99
LEGEND OF KYRANDIA	£40.99
LOOM	£39.99
MAVIS BEACON TYPING	£39.99
MICROSOFT BEEHOVEN	£54.99
MICROSOFT CINEMA 4	£54.99
MICROSOFT DINKSAURS	£49.99
MICROSOFT ENCARTA	£299.99
MICROSOFT MUSICAL INSTRUMENTS	£54.99
MICROSOFT WORKS	£119.99
MONKEY ISLAND 1	£40.99
REBEL ASSAULT	£40.99
RETURN TO ZORK	£49.99
SECRET WEAPONS OF THE LUFTWAFFE INC. ALL 4 AIRCRAFT DISKS	£45.99
SHAKESPEARE ON DISK	£23.99
SHERLOCK HOLMES CONSULTING 3	£49.99
SHUTTLE	£39.99
SPACEQUEST 4	£39.99
STAR WARS CHESS	£42.99
STRIKE COMMANDER	£44.99
T.F.X.	£36.99
TORNADO	£44.99
WING COMMANDER 2 DELUXE	£49.99
WORLD ATLAS 2	£24.99

All prices include VAT & P&P (UK only) and are subject to change without notice. Products offered subject to availability. E. & O.E. Please state Processor and Screen Type & disk size when ordering and allow sufficient time for cheque clearance. Callers by appointment only. IF A PRODUCT YOU REQUIRE IS NOT LISTED PLEASE CALL

PC review

recommended

PC Review has long run its best buys recommendations on these pages, but from this issue, we're formalising the process, with our new PC Review Recommended awards. Games billed as PC Review Recommended will be few and far between, but they will be, in our opinion, outstanding. A PC Review Recommended award is a guarantee of excellence



Syndicate
Bullfrog/Electronic Arts,
£44.99

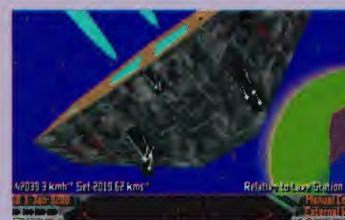
A successful combination of action and strategy in which you head a huge corporation bent on world domination. Set in the near future, it's extremely atmospheric, absorbing and fun to boot.



Tornado
Digital Integration, £44.99
Tornado shows just what can and should be done with the flight sim. Ignoring flashy graphics for variety and playability, Tornado ranks up there with Falcon 3.0 as one of the best tech-heavy sims on the market today.



TFX
DID/Ocean, £39.99
A very versatile playable flight sim with separate gaming modes to cater for the more technically minded as well as those who simply want to shoot the enemy out of the sky. Graphically, it's also a cut above the rest.



Frontier: Elite II
Gametek, £39.99
Following in the footsteps of the much lauded Elite, Frontier has to be the biggest space sim of the decade. An exciting mixture of combat and trading, Frontier has enough to keep anyone happy for months. A must have.

PC Review Recommended

Your chance to win a copy of Frontier: Elite II — recommended this month

Only one game, Frontier: Elite II, has been awarded a Recommended accolade this month. Answer the following question correctly, and send your entry to PC Review Recommended, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU, to reach us by December 7, 1993, and your answer will be placed in the prize draw for a copy of Elite II.

☐ Frontier: Elite II

Q: What are the three different start positions in Frontier: Elite II?

A: 1)
2)
3)

Name
Address
.....

WIN!

PC Review Recommended games

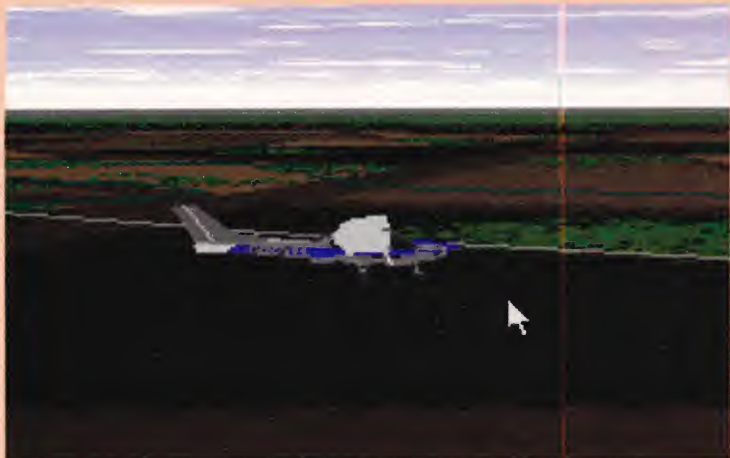
Not only do you have the advantage of knowing that these are currently the best games in their class, but we give you the chance to win a copy of a PC Review Recommended title. We have five copies of each newly Recommended game to give away to the winners of this competition.

How to enter

If you'd like the chance to win a copy of TFX, simply answer the question on the form, left, and send your entry on a postcard or back of a sealed envelope to PC Review Recommended, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

The closing date is December 7, 1993, and any entries received after that will not go into the prize draw. All normal competition rules apply, particularly the one about not sending in multiple entries. One form per person, please!

Charts: *the PC Top 10*



- | | |
|---------------------------------|-------------------------------|
| 1. Flight Simulator 5 | <i>Microsoft</i> |
| 2. Privateer | <i>Origin/Electronic Arts</i> |
| 3. Kasparov's Gambit | <i>Electronic Arts</i> |
| 4. Return to Zork | <i>Activision</i> |
| 5. Privateer Speech Pack | <i>Origin/Electronic Arts</i> |
| 6. Day of the Tentacle | <i>LucasArts/US Gold</i> |
| 7. Streetfighter 2 | <i>Capcom/US Gold</i> |
| 8. Dark Sun | <i>SSI/US Gold</i> |
| 9. X-Wing | <i>LucasArts/US Gold</i> |
| 10. Simon the Sorcerer | <i>Adventure Soft</i> |

Charts courtesy of Virgin Retail.

Your prayers answered?

The MS-DOS manual makes no pretence to be a literary work. It's dry, dense and trying to look up a specific command or procedure can be a strangely frustrating process. Yet, if you've ever browsed through a bookshop looking for a simple starter guide to DOS, you'll probably have found that books on the computing shelves are even more esoteric.

There are good books for DOS beginners — DOS for Dummies has been around for a while but you shouldn't be too put off by the title — but they are few and far between. So it's with some pleasure and a sense of discovery that PC Review recommends a little gem we've discovered.

The Way Computers & MS-DOS Work, by Simon Collin, is published by Microsoft Press, and explains all aspects of setting up your PC and DOS more clearly than just about any other book we've come across. This

not only applies to the text, but also the diagrams and photographs: step by step photos showing how everything fits together, and photos of various PC parts and peripherals as well.

It also covers DOS 6: installing the thing and the Doublespace, defragmentation and anti-virus utilities, and introduces the basic DOS commands, though this really is a beginners' book. If you can switch directories and copy files with confidence you may not learn anything new.

Anyway, it's not often we come across a book which seems so obviously suitable to the PC novice, so we thought we'd let you know about it. Even if it's too basic for you, someone you know might appreciate such a book in their Christmas stocking.

● The Way Computers & MS-DOS Work, Simon Collin, published by Microsoft Press (£14.95, ISBN 1-55615-568-9).

REVIEWED THIS MONTH

- | | |
|--|----------|
| Frontier: Elite 2 | 9 |
| Kasparov's Gambit | 8 |
| Gold Juno Sword | 8 |
| Dark Sun: Shattered Lands | 7 |
| Global Domination | 7 |
| Strike Commander: Tactical Operations | 7 |
| Goal! | 7 |
| Return to Zork | 6 |
| Kingmaker | 6 |
| The Blue and the Gray | 6 |
| Privateer | 5 |
| Patriot | 5 |
| SimFarm | 5 |
| Eight Ball Deluxe | 5 |
| CD-ROM GAMES | |
| Gobliins/Gobliins 2 | 7 |
| Dracula Unleashed | 6 |

The PC Review elite

In 26 issues and 357 reviews, only 14 games have been awarded a mark of 9 out of 10 (and no game has yet scored 10 — one day, one day ...). The elite that have made it into the nines club are:

Alone in the Dark
AV8-B Harrier Assault



Chessmaster 3000
Day of the Tentacle
Falcon 3.0
Frontier: Elite II
Indiana Jones and the Fate of Atlantis
Jimmy White's Whirlwind Snooker
LeChuck's Revenge: Monkey Island 2
Sensible Soccer
Syndicate
TFX
Tornado
Ultima Underworld



**SHOP OPEN
7 DAYS
10 am - 6.30 pm**

**897 DUMBARTON RD
WHITEINCH,
GLASGOW,
G11 6NB
TEL : 041 - 337 - 1313
FAX : 041 - 339 - 6946**

BLANK DISKS		PRINTERS		JOYSTICKS		MISC	
DS/DD	0.37 p	STAR LC - 20	£133	SAITEK MEGAGRIP		PRINTER CABLES	£3.99
DS/HD	0.58p	STAR LC-24 200	£274	III	£15.95	NULL MODEM	£3.99
STORAGE BOXES		STAR LC -200	£195	WARRIOR 5	£9.99	1 MB VIDEO CARD	£59.00
10 capacity	£1.00	HP DESKJET 500C	£319	PYTHON 5	£T.BA	1 MB TSENG ET 4000 VL	£97.00
20 capacity	£2.70	HP DESKJET 550C	£499	SPEEDKING	£14.95	MINI DESK TOP CASES	£55.00
40 capacity	£3.49			TOPSTARS	£13.95	MULTI 1/0	£19.00
100 capacity	£4.50			FREEWHEEL	£37.99	SVGA COLOUR MONITOR	£219.00
						170 MB HD	£159.00
						340 MB HD	£299.00

1 MB SIMMS ONLY £30.00
FULL SYSTEMS BUILT TO YOUR OWN SPEC

PLEASE ADD £2 FOR P&P ALL CHEQUES MADE PAYABLE TO COMPUTERS "N" DREAMS ALL PRICES INCLUSIVE.

RIP OUT AND TEAR DOWN TO

John Menzies

In John Menzies computer departments, you'll find remarkable deals on entertainment software across all formats. And in every magazine below, you'll find another £5 voucher waiting to save you money. Buy the titles, rip the vouchers and cash in.



£5 OFF

**YOUR NEXT SOFTWARE PURCHASE
AT JOHN MENZIES COMPUTER
DEPARTMENTS WHEN YOU SPEND
£19.99 OR MORE.**

This offer is valid until 4th December 1993. This voucher cannot be exchanged for cash.

Only one voucher can be used for any one purchase.

To the Store Manager:

Return this voucher to head office with your monthly tokens and voucher return.

FOR STORE USE ONLY

Store code No. _____
Till trans. No. _____
Sales assistant initials _____

Cash value 0.001p

RICOH LP1200 PCL5 LASER PRINTER

400DPI 2Mb RAM 6PPM £599

A4 TEXT/A5 GRAPHICS @ 400dpi • A4 GRAPHICS @ 300dpi. A 2Mb RAM UPGRADE IS REQUIRED TO PRINT A FULL A4 PAGE OF GRAPHICS AT 400dpi
HP LASERJET III™ COMPATIBLE • FLASH ROM UPGRADEABLE!

Ricoh, have used their expertise to produce a 'first' in laser printers, the LP1200 with FLASH ROM. HP LaserJet III™ compatible, the LP1200 employs industry proven laser technology which, unlike LED printers, uses a laser light source to produce the most accurate and intense printed images at a range of print resolutions up to 400dpi. A fast efficient processor and engine, plus a straight paper path design allows printing at a full 6 pages per minute. The 2Mb RAM version prints a full A4 page of text or graphics at 300dpi. Using standard resident fonts and the alternate controller firmware supplied, it can also print an A4 page of text or A5 page of graphics at 400dpi and, using the Windows driver supplied, an A4 page of text at 400dpi from Windows 3.1.



SHOWN WITH UNIVERSAL FEEDER TOP TRAY (OPTIONAL EXTRA)

The 4Mb RAM version can print a full A4 page of graphics at 400 dpi and makes full use of the LP1200's 400 dpi printing capabilities, such as using Microsoft Windows fonts. Unique additional standard features include FLASH ROM 'future proof' technology and LAYOUT - a powerful document description language. The LP1200's unique internal FLASH ROM, which holds the printer controller firmware, can easily be updated as new developments in technology occur. This protects the investment you make in buying a Ricoh LP1200. Other manufacturers would require you to buy a new printer! Internal FLASH ROM and industry standard FLASH ROM PCMCIA cards can also be used to permanently store fonts, macros, graphics and extra emulations. Again, unlike the competition, the LP1200 includes LAYOUT, a powerful and intuitive document description language as standard. This offers unique opportunities to develop custom made printing systems. Forms and document templates can be designed complete with logos and stored electronically in the LP1200's FLASH ROM, alleviating the need for pre-printed forms!

The LP1200 comes with a 100 sheet A4 paper tray as standard. An optional universal feeder automatically feeds up to 150 sheets of paper (up to 169gsm), 15 envelopes, transparencies and labels.

CONSUMABLES + ACCESSORIES

PRODUCT CODE	PRODUCT DESCRIPTION	PRICE EXC VAT
CAB 7500	Cable for PC/ST/Amiga	£8.47
KIT 5200	Laser Starter Kit inc Cable	£12.50
LAA 5238	Universal Feeder (2nd Tray)	£85.00
LAA 5262	2Mb RAM Module	£85.00
LAA 5210	Developer/Toner Cartridge	£65.00
LAA 5225	OPC Cartridge (Drum)	£89.00
LAA 5312	A4 Paper Tray (100 Sheets)	£35.00
FAX 1200	Ricoh Fax/Modem Software/Firmware	£120.00
MOD 7199	Pace Microlin FX Fax/Data Modem	£180.00
LAA 5279	Ricoh Flash ROM Card (0.5Mb)	£49.00
LAA 5286	Ricoh Flash ROM Card (1Mb)	£199.00
LAA 5290	Ricoh Flash ROM Card (4Mb)	£599.00

All Prices are Exc VAT - CALL FOR A FULL PRICE LIST
*Note: A4 paper tray is already included in the printer price. More A4 trays can be purchased to feed different coloured stationery.

FEATURES	IBM 4029-020	FUJITSU VM600	CANON LBP-4 PLUS	STAR 8III	RICOH LP1200
Average Street Price (excl. VAT)	£929	£699	£659	£899	£699
Maximum resolution in dots per inch	300 x 300	300 x 300	300 x 300	300 x 300	400 x 400
Windows 3 Driver @ 400 dpi	-	-	-	-	YES
Print Speed	6ppm	6ppm	4ppm	8ppm	6ppm
Straight Paper Path	-	NO	(ONLY FACE UP)	YES	YES
PCL 5 Printer Command Language	-	YES	-	YES	YES
HP-GL/2 Vector Graphics included	YES	YES	YES	YES	YES
Resolution Improvement/Enhancement	YES	YES	YES	YES	YES
Standard RAM	1Mb	1Mb	512K	1Mb	2Mb
Full A4/300 dpi graphics with standard RAM	-	-	-	-	YES
Warm Up Time	33 secs	25 secs	<60 secs	60 secs	45 secs
First Page of Text Output	-	15 secs	31 secs	18 secs	<15 secs
Document Description Language included	-	-	-	-	YES
Flash ROM	-	-	-	-	YES
Flash ROM Upgradeable Firmware	-	-	-	-	YES
PCMCIA Card Slot	-	-	-	-	YES
Scaleable Resident Fonts - in HP LJ III Emulation	0	8	0	8	8
Resident Bit-Mapped Fonts	10	14	2	14	14
AGFA IntelliFont Scaleable Font Technology	-	YES	-	YES	YES
HP LaserJet III Emulation Included	-	YES	-	YES	YES
EPSON FX Emulation Included	-	YES	YES	YES	YES
IBM ProPrinter Emulation Included	-	YES	YES	YES	YES
Standard Tray Capacity	200	150	70	200	100
Protective cover on standard tray	YES	-	YES	YES	YES
Cost per copy**	1.9p	2.0p	2.1p	2.2p	1.65p
Min-Max Paper Weight in gsm	60-163	60-157	60-105	60-135	60-169
Ability to print on OHP Film	YES	YES	YES	YES	YES
Ability to print on 169gsm card (Manual Feed)	-	-	-	-	YES
Standby - Noise Level	38dB(A)	35dB(A)	<43dB(A)	<43dB(A)	<38dB
Printing - Noise Level	50dB(A)	46dB(A)	<53dB(A)	<53dB(A)	<48dB
PC Independent PLAIN PAPER FAX OPTION	-	-	-	-	YES

**As quoted by manufacturers - July '93

CORPORATE SALES TEAM
Tel: 081-308 0888
Fax: 081-308 0608

- 6 PAGES PER MINUTE
- 2Mb RAM AS STANDARD
Upgrade to 4Mb RAM only £85.vat - see below
- PCL5 - inc HP-GL/2
With scalable fonts and vector graphics
- SHARP EDGED PRINTING
Ricoch FIAL (Fine Image Algorithm) enhances resolution
- 400dpi RESOLUTION
(Default res. - 300dpi. Will address 200, 240 & 400dpi)
- UNIQUE FLASH ROM
For controller upgrade and storage
- PCMCIA CARD SLOT (PCMCIA/JEIDA Compatible)
For programmable FLASH ROM cards
- EXPANSION BOARD SLOT
For improved connectivity eg. Coax/Twinax, PC-LAN etc
- LAYOUT Document Description Language
- SERIAL + PARALLEL PORTS
- 1 YEAR ON-SITE WARRANTY
Next working day response

FREE DELIVERY

LP1200 WITH SINGLE BIN & 2Mb RAM LAS 5200 **£599** + VAT = £703.83

RAM UPGRADE - 2Mb to 4Mb (LAA 5262) **£85 + VAT**
UNIVERSAL FEEDER (LAA 5238) **£85 + VAT**
FAX OPTION Requires a modem (FAX 1200) **£120 + VAT**
MODEM Pace Microlin FX for Fax Option (MOD 7199) **£180 + VAT**



SILICA OFFER YOU

Before you decide when to buy your new laser printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or consumables, or help and advice. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the 'Silica Service'.

- **FREE OVERNIGHT DELIVERY:**
On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:**
A team of technical experts will be at your service.
- **PRICE MATCH:**
We match competitors on a 'Same product - Same price' basis.
- **ESTABLISHED 15 YEARS:**
We have a proven track record in professional computer sales.
- **PART OF A £50M COMPANY (with over 200 staff):**
We are solid, reliable and profitable.
- **BUSINESS + EDUCATION + GOVERNMENT:**
Volume discounts are available. Tel: 081-308 0888.

- **SHOWROOMS:**
We have demonstration and training facilities at all our stores.
- **THE FULL STOCK RANGE:**
All of our requirements are available from one supplier.
- **FREE CATALOGUES:**
Will be mailed to you with special offers and full details of hardware, peripherals and software.
- **PAYMENT:**
We accept most major credit cards, cash, cheque or monthly terms (APR 29.8% - written quotes on request).



HOT LINE 081-309 1111

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX
Order Lines Open: Mon-Sat 9.00am-7.00pm (Sat 9.00am-5.30pm) No Late Night Opening
LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA
Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening
LONDON SHOP: Selfridges (Basement Area), Oxford Street, London, W1A 1AB
Opening Hours: Mon-Sat 9.30am-7.00pm Late Night: Thursday - 8pm
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday - 7pm
ESSEX SHOP: Keddies (2nd Floor), High Street, Southend-on-Sea, Essex, SS1 1LA
Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 7pm
IPSWICH SHOP: Debenhams (2nd Floor), Waterloo House, Westgate St, Ipswich, IP1 3EH
Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 9pm

To: Silica PCREV-1293-75, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON RICOH LP1200

Mr/Mrs/Miss/Ms: Initials: Surname:
Company Name (if applicable):
Address:
Postcode:
Tel (Home): Tel (Work):
Which computer(s), if any, do you own? 75W

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

A SELECTION OF OUR PRODUCTS - ALL PRICES INCLUDE VAT - CALL IF NOT LISTED

ADVENTURES

Alone in the Dark.....£27.99
Day of the Tentacle.....£26.99

Day of the Tentacle Sound Pack

(Incl Day of the Tentacle, Warrior 5 Analog joystick, speakers & sound card)
Sound Galaxy BXII.....£89.99
SoundBlaster V2 Deluxe.....£114.00
Sound Galaxy NX PRO-Extra.....£135.00
SoundBlaster PRO Deluxe.....£159.00
Power-Amplified ZY-FI, Volume control
Add £31

Dracula.....£24.99
Freddy Pharkas.....£24.99
Indiana Jones Fate of Atlantis.....£23.49
Kings Quest VI.....£27.99
Monkey Island 2 Le Chucks Revenge.....£24.99
Protostar.....£24.99
Return of the Phantom.....£27.99
Return to Zork.....£28.99
Ringworld: Revenge of the Patriarch.....£24.99
Seven Cities of Gold.....£22.49
Shadow of the Comet.....£27.99
Sherlock Holmes (Lost Files).....£24.99
Simon The Sorcerer.....£24.99

FLIGHT SIMULATIONS

A320 Airbus N American Edition.....£29.99
Aces Over Europe.....£Call
AV8B Harrier Assault.....£24.99
B17 Flying Fortress.....£27.99
Comanche Maximum Overkill.....£28.49
Elite 2.....£24.99
F-117A Stealth Fighter 2.0.....£25.49
Falcon 3.0.....£27.99
Falcon 3.0 Mission Disk.....£15.99
Flight Simulator 5 (Microsoft).....£30.99
F35 San Francisco Scenery Disk.....£Call
Harrier Jump Jet.....£28.49
Head to Head MIG-29 & MiG-19 Stealth.....£24.99
MIG 29 (For Falcon 3.0).....£15.99
Privateer.....£30.99
Privateer Speech Pack.....£12.99
Reach for the Skies.....£22.49
Secret Weapons of The Luftwaffe.....£25.99
Strike Commander.....£30.99
Strike Commander Speech Pack.....£12.99
Strike Commander Tactical Operations.....£12.99
Tornado.....£27.99
Wing Commander II.....£24.99
Wing Commander II Ops1/2.....£13.99
Wing Commander II Speech Pack.....£12.99
X-Wing.....£28.49
X-Wing Mission:Imperial Pursuit.....£13.99

SPORTS

Archer Maclean's Pool.....£23.49
Front Page Sports Football PRO.....£24.99
Jimmy White's Snooker.....£22.49
NHL (Ice) Hockey.....£27.99
NFL CC Football (American).....£24.99
Sports Masters (PGA Golf, Indy 500, Euro Champ '92, Adv. Tennis).....£21.99

GOLF

David Leadbetter's Golf.....£27.99
Jack Nicklaus Signature Edition.....£25.49
Links 386 Pro.....£28.99
Links 386 Courses (Belfry etc).....£15.49
Nik Faldo's Championship Golf.....£25.49

MOTOR RACING

Formula One Grand Prix.....£27.99
Lotus: The Ultimate Challenge.....£22.49
Rally (Network Q RAC Rally).....£21.99

Xmas Gift Idea:

F1 Grand Prix plus Logic 3
FreeWheel £59.99

SDCCER

Championship Manager '93.....£18.99
Football manager 3.....£18.99
Goal! (Kick Off).....£22.49
Premier Manager.....£18.99
Sensible Soccer.....£20.49

Sensible Soccer Fun Pack

(incl:Sensible Soccer, Konix Speedking Digital joystick and games/sound card)

Quickjoy Games Card.....£39.99
Sound Galaxy BXII speakers.....£84.99
SoundBlaster 2 Deluxe, speakers.....£108.00

BUDGET GAMES

CJ's Elephant Antics/ In USA.....£6.99
Carrier Command.....£6.99
Chuck Yeager's Air Combat.....£7.99
Hook.....£9.99
Indiana Jones Last Crusade (Adv.).....£11.49
Legend.....£13.99
Populous/ Promised Land.....£10.99
Prince of Persia.....£9.99
Stunt Driver.....£10.99
The Immortal.....£9.99

ROLE-PLAYING:

Bayreath at Kronor.....£27.99
Dark Sun: Shattered Lands.....£28.99
Eye of The Beholder 3.....£24.99
Ishar 2 Messengers of Doom.....£20.49
Lands of Lore.....£23.99
Legends of Valour.....£24.99
Might & Magic V Dark Side Xeen.....£28.99
The Legacy.....£27.99
The Shadow of Yaeblus.....£24.99
Ultima Underworld 1 & II.....each £24.99
Ultima VII The Black Gate.....£24.99
Ultima VII 2 Serpent Isle.....£27.99
Utopia Double Pack.....£22.49

WAR GAMES

Ambush at Sorinor.....£24.99
Battle Isle Data Disk.....£13.99
Battle Isle '93.....£16.49
Fields of Glory.....£27.99
Gunship 2000.....£24.99
Gunship 2000 Scenario Disk.....£15.99
History Line 1914-1918.....£24.99
Napoleons Compilation.....£21.99
Pacific War.....£25.49
Siege.....£18.99
V for Victory 4: Gold Juno Sword.....£24.99

STRATEGY

Air Bucks V1.2.....£21.99
A-Train Construction Kit.....£11.49
Carriers at War.....£22.49
Carriers at War Construction Kit.....£25.99
Chess Maniac 5 Billion and 1.....£27.99
Chessmaster 4000 Turbo(Windows).....£Call
Civilization.....£24.99
Dune 2: Battle for Arrakis.....£22.49
Even More Incredible Machine.....£25.99
Fritz 2 (Powerful Chess Partner).....£69.99
Kasparov's Gambit (Chess).....£27.99
Laser Squad.....£21.99
Lemmings 2: The Tribes.....£24.99
Pirates! Gold.....£27.99
Rags To Riches.....£24.99
Railroad Tycoon Deluxe.....£25.99
Sim City For Windows.....£28.99
Starlord.....£Call
Stronghold (SSI / D&D).....£22.99
Syndicate.....£27.99
The Patrician.....£21.99

ARCADE/PLATFORM

American Gladiators (as TV Show).....£18.99
Another World.....£19.49
Batman Returns.....£18.99
Blade of Destiny.....£24.99
Body Blows.....£18.99
Dyna Blaster.....£21.99
Flashback.....£23.99
Gods.....£22.49
Jurassic Park.....£21.99
Microsoft Arcade.....£14.49
Pinball Dreams.....£23.99
Prince of Persia 2.....£24.99
Ringworld: Revenge of Patriarch.....£24.99
Robocod (James Pond 2).....£19.49
Spear of Destiny.....£25.49
Streetfighter 2.....£18.99
The Lost Vikings.....£21.99
Wizkid.....£18.99
Yo Joel.....£16.99
Zool.....£21.99

COMPILATIONS

Air Combat Classics (Battle Hawks, Secret Weapons Luftwaffe, Missions).....£28.49
Combat Classics (F-15 Strike Eagle 2, Team Yankee, 688 Attack Sub).....£21.99
Space Legends (Wing Commander, Elite Plus, Mega Traveller 1).....£21.99
The Greatest (Dune, Lure of The Temptress, Shuttle).....£23.49

CREATIVE

3D Construction Kit 2.0.....£31.99
Disney Animation Studio.....£69.99
Stunt Island.....£30.99

SOUND/VIDEO CARDS

Sound Card MIDI Kit.....£29.99
Soundblaster
Soundblaster V2 Deluxe, speakers.....£77.49
Soundblaster PRO Deluxe, speakers.....£119.00
Soundblaster PRO 16.....£159.00
Soundblaster PRO 16 ASP.....£195.00
SoundSense - Sound Galaxy
Galaxy BXII, speakers.....£54.99
Galaxy NX PRO-Extra, speakers.....£99.99
Galaxy NX PRO 16, headphones.....£159.00

SoundSense Entertainment Pack
(Including Indian Jones, AV-8B Harrier Assault, Zool, and stereo speakers)
BXII Entertainment Pack.....£94.99
NXPRO Entertainment Pack.....£139.00

Labtec CS - 150.....£17.99
Labtec CS - 700.....£29.99
Screenbeat Speakers.....£14.99
Zy-Fi Speakers.....£32.99

LOGITECH SCANNERS

ScanMan32 DOS, OCR s/w.....£99.99

MUSIC

Band-in-the-Box V5.....£76.25
MIDI Max Pack.....£165.00
PC Drummer Windows.....£49.99
PC JukeBox DOS.....£29.99
Powertracks.....£45.99

PC Karaoke CD-ROM with 12 songs and quality microphone.....£79.99

Rave (MIDI Recording Studio).....£44.99
Quickscore Deluxe for Windows.....£139.00
Sonic The Jukebox WIN.....£6.99
SuperJam I Windows.....£99.99
SongWright DOS.....£99.99

MIDI Keyboards/Interfaces

Fatar Master: Studio 49.....£109.00
Fatar Master: Studio 61 etc.....£Call
CMS, Key Midiator, MIDIMan Interfaces.....£Call

Miracle Piano Full Size Keyboard!
and extensive teaching software.....£265.00

EDU-TAINMENT

Beauty and the Beast (Disney).....£19.49

Dr T's Sing-A-Long

Music, animations, lyrics & Musical notation-Over 25 Classic Childrens Songs (Tsy Bitsy Spider, Old MacDonald etc).....£44.99

Noddy's Big Adventure.....£19.49
We sell a full range of educational programs (Disney, Europress, Jumping Bean, Lander.....£Call

CD-ROM DRIVES

Mitsumi LU005S Internal.....£162.00
Panasonic NEC Toshiba.....£Call

CD-ROMS

Beauty and the Beast (Disney).....£33.99
Chessmaster Pro (windows).....£37.99
Day of the Tentacle.....£29.99
Dinosaur Adventure.....£39.99
Dune with synchronised speech.....£33.99
Eye of The Beholder 3.....£25.99
Historyline 1914-1918.....£25.99
Indiana Jones Fate of Atlantis.....£29.99
Laura Bow 2 Dagger Amon Ra.....£29.99
Legend of Kyrandia.....£29.99
Microsoft Dinosaurs.....£39.99
Monkey Island/Loom.....Each £29.99
Motor Stars with Porsche.....£42.49
Pacific Islands.....£23.99
Railroad Tycoon.....£24.99
Return to Zork.....£32.49
Secret Weapons of The Luftwaffe.....£34.99
Sherlock Holmes Detective 2 or 3.....£34.99
Space Adventure.....£49.99
Space Quest IV.....£29.99
Space Shuttle.....£25.99
Star Trek 25th Anniversary.....£Call
The 7th Guest.....£47.49
UltimaUnderworld/Wing Commander 2.....£32.49
Wing Commander 2 Deluxe.....£32.49

MULTI-MEDIA Upgrade Kits

(incl. Mitsumi CD-ROM Drive, Speakers, Kodak Photo CD, 7th Guest, Soundworks and Choice of 2 from : Monkey Island, Chessmaster, Sherlock Holmes Loom, SWOTL, Loom etc.)
Introductory: Galaxy BXII Card.....£359.00
PRD: GalaxyNXPROExtra Card.....£399.00

JOYSTICKS/GAMECARDS

Gravis Analog.....£31.49
Gravis Analog 'PRO' Flightstick.....£37.49
G-Force Flight Yoke.....£42.99
Konix Speedking Digital.....£10.49
Logic 3 FreeFlight Analog.....£34.99
Logic 3 FreeWheel Analog.....£33.99
Logic 3 Pinto Digital Autofire.....£17.99
Parallel Gamport for Notebook PC.....£34.99
Quickjoy Topstar Digital.....£18.99
Quickjoy Games Card.....£9.99
Quickshot Warrior 5 Analog.....£9.99
Quickshot Card & Analog Joystick.....£19.99
The Bug Digital (Cheetah).....£10.49
Thrustmaster Weapons Cntrl flight.....£Call
Virtual Pilot Yoke.....£74.99
Westpoint CH Flightstick 'PRO'.....£59.99
WestpointCH Flightstick.....£33.99
Joystick Splitter/Y cable.....£8.99

Three of the most exceptional Space Simulations ever!



• **Megatraveller 1**

"There can't be a more prestigious role-playing system than Megatraveller 1".

PC Plus

• **Elite Plus**

"Quite simply the most original gameplay since the birth of computer entertainment. An all time classic".

PC Format

• **Wing Commander**

"This is more than ever an essential addition to any self-respecting PC gamer's collection".

PC Review

The Complete Space Experience for IBM PC and Amiga

*Elite on Amiga versions

ELECTRONIC ARTS

MICROPROSE

ORIGIN

empire
SOFTWARE

Empire Software, The Spires, 677 High Road, North Finchley, London N12 0DA.

Telephone: 081-343 9143

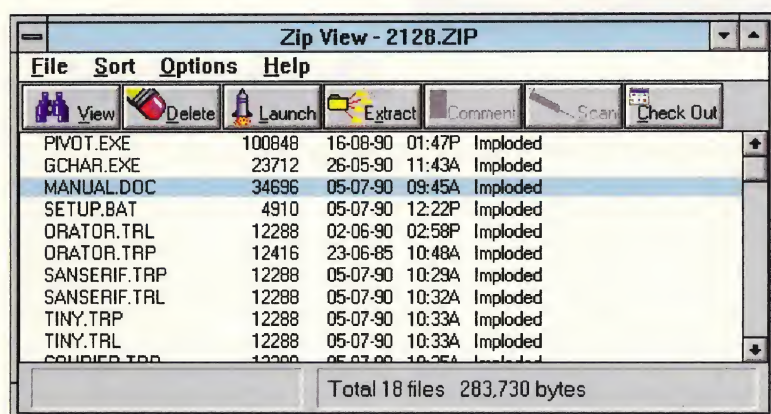
Empire Software is a registered trademark of Entertainment International (UK) Ltd.

WE OFFER A TWO PERCENT DISCOUNT FOR ORDERS ACCOMPANIED BY CHEQUE OR POSTAL ORDER
Please add £1 UK P&P per game/CD-ROM/jukebox ordered, £2 for joysticks/Gamecards. £6 for small packs
ALL PRICES INCLUDE VAT and are subject to change without notice. Products offered subject to availability. E & OE. All sales subject to standard terms & conditions available on request. Please state Processor/Screen Type when ordering and allow sufficient time for cheque clearance.

NAME.....Processor/Screen
ADDRESS.....
POSTCODE.....PHONE.....
ITEM.....PRICE.....
ITEM.....PRICE.....
PAYMENT BY CHEQUE/PO to PC Entertainments Ltd/CREDIT/DEBIT CARD.....P&P.....
Card No.....TOTAL.....
SIGNATURE.....EXPIRY DATE.....PCR12/93 E&OE
PC Entertainments Ltd is registered in England & Wales: No 2839447 Reg. office: 6 Rook Close, Wokingham, Berks RG11 2SQ

Shareware reviews

Sam Mackenzie is Dragging and Zipping, ray tracing, personally organising, playing pinball, shooting 'em up, and dithering with graphics this month



Drag and Zip

Hard disks are always filling up. The obvious solution is to use some sort of disk compression, but if you are worried about compressing your entire disk, why not just compress parts of it? Drag and Zip is a Windows utility that makes it very easy to use either Pkzip or LHA under Windows. It's also featured on this month's cover disk (3.5" edition), so you can try it out for yourself, and see just how easy it is to use effectively.

Once you have installed Drag and Zip on to your hard disk, its icon appears within the File Manager whenever you start it running. You

can drag files from the usual File Manager windows on to the icon and they will be automatically compressed using either of the two standard compression packages. You can drag a single file, groups of files or an entire directory and they will all be compressed into an archive.

You have some choices over how the compression is performed. You can set the name of the archive file. If this already exists then the files are added to it. You can also select the compression mode.

After this, a DOS window appears and you see the files being compressed as if you had given the command from the DOS prompt. Notice that you already have to have

either Pkzip or LHA (not LHarc) for this to work.

Thus it becomes easy to archive files, but what about getting them back? For this, you use Zip View. This makes working with archived files about as straightforward as it can be. Once you select the archive file, its contents are shown to you in the form of a directory listing. Any file that you want to look at you can ask to view and it will be temporarily decompressed so you can read it. If it is a program, then you can run it — again using a temporary decompression. If you are convinced that you want the whole of the archive returned to its decompressed state then simply select the extract option.

A virus scanner can also be activated to check the archive — but again you must already have the virus scanner installed.

ZipView, and Drag and Zip itself are very nicely written implemented programs and a pleasure to use. Canyon Software, the company that wrote them, is clearly worth watching for any future programs that it produces.

The program itself works by adding a file launcher to the File Manager. What this does is to start other programs when ever you start the File Manager. Of course this is added so that the main Drag and Zip program is started along with the File Manager but you can use this facility to add programs of your choice to the File Manager.

Drag and Zip should help you keep archives of files that you only want to use occasionally and it makes unpacking zipped shareware no trouble at all!

Space Chase

Just when you thought it was safe to switch on your PC, along comes another shareware platform game that bears a suspicious resemblance to Apogee's Duke Nukem. Even Apogee itself has taken a long hard look at the original Duke to produce its latest platformer, Bio Menace.

Space Chase puts you in the role of Jason Storm, another gun toting hero who is prepared to jump up and down platforms for hours on end in order to save the world. Your mission is to track down the leaders of Evil Guys Inc and stop them from taking control of the planetary government.

Once you've found these naughty chappies you have to capture them, destroy their forces and generally kick an almighty amount of butt in standard universe-saving fashion.

The reminder screen that comes up when you exit the game hails Space Chase as classic state of the art arcade action. It has to be questionable whether or not a game that uses 16-colour EGA graphics in 1993 can be described as state of the art.

Still, it's gameplay that matters most with this type of game and in that respect at least, author Safari



Supplier:	Nildram Software
Tel:	(0442) 891331
Product code:	DRAGZIP
Price:	£3
Registration price:	£14 plus VAT
Registration package:	Reminders for registering removed
Minimum specification:	All video modes and input devices on any Windows 3.1 machine
Disk Space:	1Mb

Product
Drag and Zip

shareware tech spec
1993

Software has certainly delivered the goods.

The gameplay consists of exploring vast levels, finding keys to open doors, getting lost a lot and battling an endless stream of baddies. The idea is to find the exit at the end of every level so you can progress to the next.

There are lots of weird and wonderful machines and dalek-type sentries to dispose of, transporters to whisk you from one end of a level to another and countless switches and platforms to activate. Your journey takes you through a variety of locations, from the city to suburbia and even down the sewers. For me, Cloudland is easily the most fun of the lot. There's just something about jumping about on clouds having a pop at everyone that tickles me.

The shareware version forms part one of a three episode adventure giving you ten massive levels to play around with and there's more than enough to do in this lot to keep anyone happy for a few weeks.

Space Chase doesn't quite have the addictive quality of classics such as Duke Nukem, but if platform games are your thing, it's well worth having a go at this one. You shouldn't be disappointed.

Epic Pinball

If the mention of a pinball simulation immediately turns you off — hold on a moment! This isn't the usual low resolution, badly-implemented pinball game from the days when CGA was a high resolution mode! Epic Pinball is a full and very realistic implementation of a pinball table. The graphics are great

Supplier:	Transend
Tel:	(0274) 622228
Product code:	1465D
Price:	£2.50
Registration price:	£21.70
Registration package:	Two more episodes, cheat codes
Minimum specification:	EGA, 286 min
Disk space:	2.2 Mb
Product Space Chase 	



and the animation is even better. You pull the spring loaded pin back using the space bar. The longer you hold the space bar the further it is pulled back. When you release the space bar the ball is fired into the table and starts bouncing around. Sounds boring, but the quality of the animation is so good it is very satisfying. The board display scrolls to keep the ball in view as it bounces around so the table can be much larger than the screen size.

If you have a sound card, the stereo sound effects are excellent and help create the impression that the ball really is bouncing off bumpers and pins. You can control the flippers using the arrow keys and again the stereo sound effect comes from the correct side. The background music track is appropriate to the table being played and creates an exciting mood — conjuring up the atmosphere of a casino, the Wild West and so on.

Pressing the space bar again activates the tilt and so after you get bored looking and listening you can start practising long forgotten skills.

There are additional difficulties included with each table — just like the ones you find on a real pinball machine — and these present an additional challenge after the first novelty has worn off and enable you to clock up huge bonus scores. For example, if you hit all four 'dominoes' in one go you score points. The challenge on one table is to get the ball to go down the right-hand lane. This spells out the word GHOST, one letter at a time. Each letter gives you points: complete the

word and your bonus score is unsailable. You can opt for two-player mode for a competitive game and there is a high score league.

Only two tables are included in the shareware version and for more you have to register. You need a reasonably powerful machine to support all of this animation. I used a 386DX-25 and the speed and smoothness was very acceptable. I wouldn't like to attempt it on anything smaller than at 386SX-16 — but that's the good thing about shareware, you can try it!

I didn't expect to like Epic Pinball after all the low quality pinball games I have tried — but I was wrong. It's worth looking at just for the quality of the animation and the way the stereo sound effects work. If you enjoy playing pinball machines, this is the computer simulation to try — it has the same look and feel, except you don't need to put any money in the slot.

Supplier:	Transend
Tel:	(0274) 622228
Product code:	15500
Price:	£2.50
Registration price:	£21.99
Registration package:	More tables
Minimum specification:	VGA, Sound Blaster, Ad Lib, Gravis sound card, Keyboard, at least 386SX-16 with 544K free RAM
Disk Space:	3Mb
Product Epic Pinball 	

Supplier:	Transend
Tel:	(0274) 622228
Product code:	15510
Price:	£2.50
Registration price:	£19.95
Registration package:	Six more levels plus Lost in Space
Minimum specification:	VGA, joystick, Ad Lib, Sound Blaster, 286, 580K free RAM
Disk space:	2Mb
Product Desert Raid 	

Desert Raid

Rather than make a shoot-em-up with a plot that involves nasty aliens endangering Mother Earth, those wacky Belgian types at Copysoft have stuck you in the desert in a wobbly bi-plane with a squirrel at the controls.

The storyline centres around evil dictator Sadman Insane (honest!) who has been building up weapons of mass destruction. Sadman also claims to have found an ancient map that shows quite clearly that the entire circumference of the world was once his country.

Enter Skunny Hardnut, all-round superhero and a squirrel with an attitude. Armed with a small bi-plane, a few bombs and a truck load of luck, Skunny must thwart this evil plan and rid the world of nasty tyrant Sadders.

Your task is to guide Skunny through the desert in his bi-plane avoiding obstacles and anti-aircraft fire, while taking on the many and varied aircraft that have been sent to stop you.

Accompanied by an excellent Arabian Nights type soundtrack and superb sound effects from the Sound Blaster, you fly around blasting everything in sight, picking up





Kingston
TECHNOLOGY CORPORATION

No. 1 FASTEST
GROWING
COMPANY IN THE
USA.
(1992 Inc. MAG.)
THE FIRST NAME IN
RELIABILITY,
COMPATIBILITY AND
AFFORDABILITY

memory
direct

● Memory Direct is the largest mail order memory supplier in Europe.

● We have been supplying memory & associated products for over 5 years - our warranty and quality of service, reliability and overall integrity are unrivalled.

● CD ROM ● Graphics Accelerators ● Fax/Modem ●

MEMORY



PROCESSOR UPGRADES

EXPANSION BOARDS

NETWORK PRODUCTS

GENERIC MEMORY

CD ROM

NEC/CD38

NEC's multispin, multisession CD ROM drive weighs only 1 kg! The best portable Kodak compatible drive available. Massive data throughput of 300kb/second. **£289**

NEC/CD74

Fast 280ms access time multispin multisession external drive with self cleaning lens and double door. Suitable for Apple/IBM/clones and more - the best CD ROM drive available from a manufacturer renowned for quality and reliability. **£409**

NEC/CD84

As NEC/CD74 but internal! **£339**



All NEC drives have SCSI connectors - Interface cards are available for parallel port, MCA and AT/IDE, as well as our quality Vision-16AISP Sound Card which also has a SCSI interface.

SIGHT AND SOUND



True 16 bit stereo technology

Using advanced integrated signal processing with the quality of MEDIAVISION chipsets is now here. The first card with simultaneous playback & record. Software includes:

Voice Recognition Software ● HSC Interactive ● Monologue for Windows ● Voyetra Multimedia Tools ● Quick Sound Test, DOS Station ● Audio DAT ● Mixer and Device Drivers ● Stereo Music Rack

CD ROM Bundle

Fast Multisession Panasonic 562B internal drive with the Sound Vision 16AISP card. Power amp speakers, headphone and microphone set. All the software included with the 16AISP card **plus FOUR CD titles from the selection above.**

AWARD
WINNING

STOP PRESS

Panasonic 562B Drive plus interface kit, cables,
only **£196**

BESPOKE SYSTEM UPGRADES

Is your PC outmoded by today's memory hungry, processor reliant software? Unsure how to upgrade?

Our bespoke solutions are tailored to your application, system and budget.

Example 1:
486DX33 Intel processor
● GENOA Local Bus Motherboard
● GENOA Local Bus Graphics Card (IMB)
● 4MB RAM - 256k cache
● Mini Tower Case
ONLY £749

Example 2:
The Ultimate CAD Workstation
In addition to Example 1
● 17" NEC SFG FST Monitor
● DX2-66 Processor ● 2MB
GENOA Local Bus G/C
● 8 MB RAM
ONLY £700

Solutions built to YOUR requirements - not just an "off the shelf" box. Call for full details.

TV ON YOUR PC

Need to catch up on the golf then this is the upgrade for you!



The perfect way to work and play by watching TV on your PC. Supporting 2M colours, operating under windows you can capture your favourite TV shot and even print it. -all with one 16bit slot!

£379 £329

◆ CUSTOMER SUPPORT LINE 0252 316060 ◆ FAX LINE 0252 341939
◆ DELIVERY - NEXT DAY £8.00 ◆ PAYMENT - CREDIT CARD - CHEQUE

Prices exclude carriage & VAT. Goods may be paid for by credit card, cheque or bankers draft and payable to Memory Direct and must include delivery and VAT. Prices are correct at time of going to press. All postal enquiries should be addressed to ; Memory Direct, 42-44 Birchett Road, Aldershot, Hants. GU11 1LU. All Trademarks acknowledged, E&OE

FAX-MODEM

Miniature BABT approved pocket Fax modem, with Fast 9600 fax 2400 modem.



- Winfax Lite
- Accufax
- Comit Data Software
- All cables
- 5 year warranty
- PSU & Battery
- V42 BIS MNP4 & 5

"The Maxlite is most impressive ... making the sending and receiving of faxes a breeze. Overall this is a competitively priced fax/modem that performs well."

John Ash, PC Direct, October 1993

ONLY £129

CALL NOW for any of these enhancements

OVER 200 CD TITLES

available including:
7th Guest ● Mayo Family Health ● Dagger of Amon

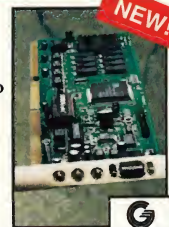
- Sherlock Holmes
- Dinosaur Adventure
- Beauty & the Beast
- Guinness Book of Records
- World Atlas ● Animals
- Wing Commander ● King Quest 5 ● Kodak "Access" plus more

£20 with any CD ROM Drive

VERY SPECIAL OFFER

GRAPHICS & SOUND

GENOA AUDIOGRAFX



- The Single Board Audio and Graphic Solution
- FM synthesis, 16 Bit recording and playback
- 24 Bit True Colour Windows Accelerator
- 1280 x 1024 256 Colours available
- Soundblaster, Adlib, Windows Sound System compatible

From **£169**

MONITORS

NEC

From the high end CAD requirement of a huge 21" edge to edge monitor to the compact 15" model NEC provide the ultimate monitor upgrade boasting seven models in the range. All carry the same quality benchmark - Multisync.

3FGE 15" Interlaced 1024 x 768	£359
3FGE 15" Non Interlaced 1024 x 768	£455
4FGE 15" Non Interlaced with ADC 1024 x 768	£515
5FGE 17" Non Interlaced with ADC 1024 x 768	£815
5FG 17" Non Interlaced with ADC 1280 x 1024	£930
6FG 21" Non Interlaced with ADC 1280 x 1024	£1610

CALL WITH YOUR MACHINE DETAILS AND WE WILL PROVIDE THE SOLUTION

COLOUR PRINTER

FARGO-PRIMERA

The first high-quality sub-£1,000 thermal wax transfer/ dye sublimation printer

Full colour bit-maps are now readily available to Windows 3.1 users.

"the bottom line is that it would make an excellent purchase for any one who needs to produce high quality presentation material"

ONLY £825
Inc. Photo realistic Kit

Mark Houghton, PC Direct, October 1993

- Postscript option available ● 4 times faster than an ink jet ● Prints on T-shirts, OHP's, A4 and letter size paper ● No drying time, no smearing

MORE
MEMORY

PCMCIA



Ruggedised, secure, compact and absolute compatibility. These are the trademarks of an emerging new standard in credit card sized plug and play upgrades.

Solutions include: memory, mass storage, fax/modems, network adaptors and SCSI cards.

memorydirect
0252316060

● Expansion Boards ● CD Software ● Data Storage ●

power-ups that float down the screen in parachutes and dodging missiles every step of the way. With non-stop action, over the top explosions and a great sense of humour — startled Arabs come floating down the screen after you've blown up their helicopters — Desert Raid has all the right stuff to keep you interested from start to finish.

The 256 colour VGA graphics are excellent and show what can be done by shareware designers if they put their minds to it, and the four fun-filled levels included in the shareware version should be more than enough to give you a taste of what to expect from the full registered version of the game.

Desert Raid is one of several adventures featuring Skunny, all of which should be available by the time you read this review and if the previews I've seen are anything to go by, you can expect the same high standard of gameplay and visual quality from all the others.

Lost In Space has Skunny driving about the surface of the moon in a platform game very similar to the Atari classic Moonbuggy, and you can get that title free by registering Desert Raid. Now that's what I call a bargain!

Graphics Workshop

The need to convert between different graphics file formats isn't as great a problem as it used to be because most of the graphics programs now read and write a reasonable range of formats. It still can be troublesome, though!

Graphics Workshop is a bit-mapped format converter and viewer. It is very difficult to write a good file format converter and as a result the best known such programs,

Supplier:	Ensign Shareware
Tel:	(081) 778 2871
Product code:	GWORKSH
Price:	£2.50
Registration price:	\$40
Registration package:	No beg. screen
Minimum specification:	HGA, CGA, EGA, VGA, any with 384K RAM extended memory desirable
Disk space:	880K

Product Graphics Workshop

shareware tech spec 1993

such as Hijaak, cost a lot of money. By comparison, Graphics Workshop is cheap to use and register, and it works.

It runs under MS-DOS, but can also happily function under Windows. It is fast and easy to use. The formats that it can convert between are MAC (MacPaint), IMG (GEM/Ventura), PCX (Paintbrush), GIF, BMP, IFF/LBM, TGA, MSP, WPG, PIC (PC Paint, not Lotus), TIFF and CUT (Halo).

In addition, there is some support for bitmapped EPS files. You can also create images of text files in plain ASCII and self-displaying exe files. These self-displaying files enable you to package a graphic up and send it to another user so that they can have a look at it just by typing its name.

To convert a file from one format to another, you simply select it together with the new format. You can also batch convert files. The range of file formats supported includes many variations on the standard format, for example, 24-bit versions of PCX and tiff formats. You also have the facility to scale and crop the image while it is being converted.

If you select a file and press return then you can also have a look at it. In most cases, conversion between one format and another will be all you really require but there are a range of special effects that you can

apply. You can reduce the number of colours used, convert to grey scale, sharpen, soften, posterise and convert to 24-bit colour, should you so wish!

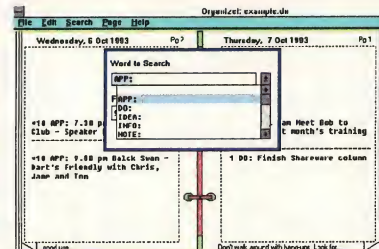
There is also a range of dithering methods that you can use to convert a colour or grey scale image to black and white. Dithered images are most useful when you need to print an image. The majority of applications will attempt to dither an image before they print it out, but Graphics Workshop is likely to do a better job.

If you have a LaserJet or PostScript printer then you can print images direct to it. A range of other printers are also supported including many dot matrix printers. The support for video different video displays is also very good. Most of the standard SVGA cards seem to be supported, along with some rarities such as the Amstrad 1640's 16 colour EGA mode.

A really long, comprehensive and enthusiastic manual is included on the disk and you do need to read it to get the most out of the program.

You don't really get much extra in the registered version, except for an up-to-date copy and the after-sales support, but the final part of the manual does state that if you don't register the program, "a leather-winged demon of the night will tear itself, shrieking blood and fury, from the endless caverns of the nether world, hurl itself into the darkness with a thirst for blood on its slaving fangs and search the very threads of time for the throbbing of your heartbeat." I just thought you might like to know that.

Although I have a copy of Hijaak, its interface is so awful and it is so bug-ridden that I intend to give Graphics Workshop a chance to prove itself better — what more can I say as a recommendation?



Organize!

When I loaded Organize! I had some preconceived ideas about how personal organiser software should look and behave and I have to admit that I was disappointed. This is a primitive implementation and you have to do all the organising for yourself. The advantage it has over a word processor is its diary-page presentation.

Organize! encourages you to develop your own methods of making and finding notes. It suggests you use a simple keyword system — APP for appointment, DO for a To-Do task, Idea for things you want to think about — and then a numbering system for periods or priorities. For example, if you preface October's appointments with 10 then when you search for 10 APP you will see a list of that month's appointments. Mark urgent to do tasks 1 DO, less pressing ones 2 DO and so on. It also has a method for indicating that an appointment or task has been completed — preface its entry with *.

The program is password protected but in the shareware version there is only one password, share, and it's not a secret — the log-on screen tells you what it is. The ability to change or omit the password is one of the facilities that you get when you register.

Supplier:	Springsoft
Tel:	(0352) 770049
Product code:	Organize!
Price:	£1.99
Registration Price:	\$35
Registration package:	Customisable password
Minimum Specification:	EGA, VGA, SVGA, mouse, keyboard, AT with Windows 3.0
Disk space:	250K

Product Organize!

shareware tech spec 1993



Visionary Software

Tel: (0305) 853513

Mon-Sat
9am-9pm

**You might beat our Price
But you won't beat our
service.**

Title	Price	Title	Price	Title	Price
ACES OVER EUROPE.....	£ TBA	GUNSHIP 2000.....	£28.99	STUNT ISLAND.....	£37.99
ACES OF THE PACIFIC.....	£30.99	GUNSHIP 20000 ISLAND & ICE.....	£18.99	SYNDICATE.....	£33.99
ACES OF THE PACIFIC WW1 1946.....	£19.99	HARRIER AV8B.....	£29.99	TASKFORCE 1942.....	£33.99
AIR WARRIOR.....	£26.99	HISTORY LINE 1914-1918.....	£29.99	TERMINATOR 2029.....	£29.99
ALONE IN THE DARK.....	£30.99	HUMANS.....	£22.99	MISSION OPERATION SCOUR.....	£17.99
A.T.A.C.....	£33.99	INCA.....	£33.99	THE LEGACY.....	£33.99
ATP VERSION D.....	£32.99	INCREDIBLE MACHINE.....	£29.99	THE PATRICIAN.....	£26.99
A TRAIN.....	£28.99	INDIANA JONES FATE OF ATLANTIS.....	£27.99	T.F.X.....	PHONE
BAT II.....	£29.99	JIMMY WHITE WHIRLWIND SNOOKER.....	£26.99	TORNADO.....	£34.99
BATTLE ISLE.....	£26.99	JOE & MAC CAVEMAN NINJA.....	£22.99	ULTIMA UNDERWORLD 1.....	£29.99
BATTLE ISLE '93.....	£19.99	JURASSIC PARK.....	£25.99	ULTIMA UNDERWORLD 2.....	£29.99
BATTLE ISLE DATA DISC.....	£16.99	KINGS QUEST VI.....	£33.99	ULTIMA VII.....	£28.99
BATTLE OF BRITAIN.....	£22.99	KASPOV'S GAMBIT.....	£33.99	ULTIMA VII PART 2.....	£33.99
BATTLECHESS 4000.....	£26.99	LANDS OF LORE.....	£26.99	UTOPIA.....	£22.99
BEAUTY & THE BEAST.....	£22.99	LEGEND OF VALOUR.....	£29.99	V FOR VICTORY 4.....	£29.99
BETRAYAL AT KRONDOR.....	£33.99	LEMMINGS DOUBLE PACK I EDITION.....	£29.99	WAR IN THE GULF.....	£25.99
BUZZ ALDRIN RACE INTO SPACE.....	£37.99	LEMMINGS II THE TRIBES.....	£29.99	WAX WORKS.....	£25.99
CAESAR.....	£26.99	LINKS.....	£32.99	WING COMMANDER.....	£29.99
CAR & DRIVER.....	£29.99	LINKS 386 PRO.....	£33.99	WING COMMANDER ACADEMY.....	£26.99
CARRIERS AT WAR.....	£26.99	BANFF SPRINGS.....	£17.99	X WING.....	£33.99
CASTLES.....	£27.99	MAUNA KEA.....	£17.99	W WING IMPERIAL PURSUITS.....	£15.99
CHAMPIONSHIP MANAGER '93.....	£22.99	PINEHURST 2.....	£17.99	XENOBOTS.....	£29.99
CHESS MANIAC.....	£33.99	INNISBROOK.....	£17.99	ZOOL.....	£26.99
CHESSMASTER 3000.....	£29.99	THE BELFRY.....	£17.99		
CIVILISATION.....	£29.99	LOST FILES OF SHERLOCK HOLMES.....	£29.99		
COMMANCHE MAXIMUM OVERKILL.....	£33.99	LOST VIKINGS.....	£25.99		
CRUISE FOR A CORPSE.....	£22.99	LOTUS THE ULTIMATE CHALLENGE.....	£25.99		
CRUSADERS DARK SAVANT.....	£33.99	MARIO IS MISSING.....	£29.99		
CURSE OF ENCHANTIA.....	£26.99	MEGALOMANIA.....	£26.99		
DAVID LEADBETTER'S GOLF.....	£33.99	NFL FOOTBALL.....	£29.99		
DAY OF THE TENTACLE.....	£32.99	NHL HOCKEY.....	£33.99		
DISCOVER SPACE.....	£29.99	N.MANSELL'S WORLD CHAMPIONSHIP.....	£26.99		
DIZZY COLLECTION.....	£22.99	NODDY'S PLAYTIME.....	£22.99		
DOG FIGHT.....	£33.99	PACIFIC ISLAND II.....	£26.99		
DUNE.....	£27.99	PERFECT GENERAL.....	£26.99		
DUNE 2.....	£27.99	PINBALL DREAMS.....	£28.99		
DUNGEON MASTER.....	£26.99	PIRATES GOLD.....	£33.99		
D/GENERATION.....	£15.99	POPULOUS 2.....	£29.99		
ECO QUEST II.....	£26.99	POWERMONGER.....	£24.99		
ELITE 2.....	PHONE	PREMIERE MANAGER.....	£22.99		
ELVIRA 2 JAWS OF CEREBERUS.....	£28.99	PRINCE OF PERSIA II.....	£29.99		
EPIC.....	£25.99	PRINT SHOP DELUXE.....	£TBA		
EYE OF THE BEHOLDER 1.....	£22.99	PRIVATEER.....	£37.99		
EYE OF THE BEHOLDER II.....	£25.99	PRIVATEER SPEECH PACK.....	£14.99		
EYE OF THE BEHOLDER III.....	£29.99	PUTT PUTT.....	£22.99		
F15 STRIKE EAGLE III.....	£33.99	QUEST FOR GLORY 3.....	£33.99		
FALCON 3.....	£34.99	RAILROAD TYCOON DELUXE.....	£29.99		
FALCON MISSION MIG29.....	£18.99	RALLY.....	PHONE		
FALCON MISSION FIGHTING TIGER.....	£18.99	REACH FOR THE SKIES.....	£25.99		
FIELDS OF GLORY.....	£33.99	RETURN OF THE PHANTOM.....	£33.99		
FLASHBACK.....	£28.99	RETURN TO ZORK.....	£34.99		
FLIGHT SIM 5.....	£34.99	REX NEBULA.....	£33.99		
FUN SCHOOL 4 RANGE.....	£19.99	RULES OF ENGAGEMENT 2.....	£33.99		
FUN SCHOOL PAINT & CREATE.....	£19.99	SECRET OF MONKEY ISLAND 2.....	£24.99		
FUN SCHOOL SPELLING FAIR.....	£19.99	SILENT SERVICE II.....	£26.99		
FUN SCHOOL MERLIN MATHS.....	£19.99	SENSIBLE SOCCER.....	£23.99		
GB DATA DISK.....	£29.99	SHADOWCASTER.....	£29.99		
GOBLINS 2.....	£24.99	SHADOW PRESIDENT.....	£33.99		
GRAND PRIX FORMULA ONE.....	£33.99	SHUTTLE.....	£26.99		
GRAND PRIX UNLIMITED.....	£28.99	SIMON THE SORCEROR.....	£29.99		
GREAT NAVAL BATTLES.....	£28.99	SPACE HULK.....	£33.99		
GREAT NAVAL BATTLES ADD ON DISKS.....	£16.99	SPACE LEGENDS.....	£27.99		
		SPACE QUEST V.....	£29.99		
		SPECIAL FORCES.....	£19.99		
		SPORTS MASTER.....	£26.99		
		STARLORD.....	£33.99		
		STREETFIGHTER 2.....	£22.99		
		STRIKE COMMANDER.....	£37.99		
		STRIKE COMMANDER SPEECH PACK.....	£14.99		

Free P&P on all UK Orders

Title	Price	Title	Price	Title	Price
7TH GUEST.....	£58.99	STUNT ISLAND.....	£37.99	ULTIMA UNDERWORLD 1.....	£29.99
DAY OF THE TENTACLE.....	£34.99	SYNDICATE.....	£33.99	ULTIMA UNDERWORLD 2.....	£29.99
DINOSAURS.....	£49.99	TASKFORCE 1942.....	£33.99	ULTIMA VII.....	£28.99
DUNE.....	£42.99	TERMINATOR 2029.....	£29.99	ULTIMA VII PART 2.....	£33.99
ECOQUEST.....	£34.99	MISSION OPERATION SCOUR.....	£17.99	UTOPIA.....	£22.99
EYE OF THE BEHOLDER 3.....	£32.99	THE LEGACY.....	£33.99	V FOR VICTORY 4.....	£29.99
INDIANA JONES FATE OF ATLANTIS.....	£36.99	THE PATRICIAN.....	£26.99	WAR IN THE GULF.....	£25.99
JURASSIC PARK.....	£29.99	T.F.X.....	PHONE	WAX WORKS.....	£25.99
KINGS QUEST 6.....	£42.99	TORNADO.....	£34.99	WING COMMANDER.....	£29.99
LOOM.....	£33.99	ULTIMA UNDERWORLD 1.....	£29.99	WING COMMANDER ACADEMY.....	£26.99
RETURN TO ZORK.....	£34.99	ULTIMA UNDERWORLD 2.....	£29.99	X WING.....	£33.99
SECRET WEAPONS OF THE LUFTWAFFE.....	£36.99	ULTIMA VII.....	£28.99	W WING IMPERIAL PURSUITS.....	£15.99
SHERLOCK HOLMES III.....	£42.99	ULTIMA VII PART 2.....	£33.99	XENOBOTS.....	£29.99
ULTIMA UNDERWORLD 1 & 2.....	£38.99	UTOPIA.....	£22.99	ZOOL.....	£26.99
WILLIE BEAMISH.....	£39.99	V FOR VICTORY 4.....	£29.99		

CD ROM

7TH GUEST.....	£58.99
DAY OF THE TENTACLE.....	£34.99
DINOSAURS.....	£49.99
DUNE.....	£42.99
ECOQUEST.....	£34.99
EYE OF THE BEHOLDER 3.....	£32.99
INDIANA JONES FATE OF ATLANTIS.....	£36.99
JURASSIC PARK.....	£29.99
KINGS QUEST 6.....	£42.99
LOOM.....	£33.99
RETURN TO ZORK.....	£34.99
SECRET WEAPONS OF THE LUFTWAFFE.....	£36.99
SHERLOCK HOLMES III.....	£42.99
ULTIMA UNDERWORLD 1 & 2.....	£38.99
WILLIE BEAMISH.....	£39.99

Special Offers

AMAZON.....	£29.99
COOL WORLD.....	£21.99
DARKLANDS.....	£29.99
PUSHOVER.....	£19.99
ROBOCOP 3.....	£19.99
THE DREAM TEAM.....	£19.99
THE GAMES ESPANA '92.....	£19.99

Joysticks

CH MACH 1 +.....	£23.99
CH MACH II.....	£25.99
CH MACH III.....	£30.99
CH FLIGHTSTICK.....	£40.49
CH GAMECARD 3 AUTO.....	£32.99
CH GAMECARD III MCA.....	£40.99
QUICKSHOT SMARTCARD.....	£14.99
QUICKSHOT JOY & CARD.....	£20.99
QUICKSHOT WARRIOR 5.....	£13.99

RETURN TO ZORK NOW AVAILABLE 3.5" & CD ROM

Visionary Software Dept PCR P.O. Box 1594 Dorchester Dorset DT2 8YL

PLEASE PHONE IF YOU DO NOT SEE THE PRODUCT YOU REQUIRE

Credit Cards, Cheques & Postal Orders Accepted. All prices include P&P (UK) and VAT. Goods offered subject to availability. Prices Subject to Change without notice E&OE



AV8B

Harrier Assault

**With SVGA Harrier Assault due out any time now,
PC Review welcomes you to the first Dudley
Wheeler AV8B campaign lecture**

When I first played the Domark AV8B Harrier campaign, I lost aircraft at an alarming rate and was uncertain about what to do about the fleet, its movements and troop landings. This guide will aim to show you how to win the campaign, how to get to grips with coordinating Harrier attacks and troop landings and how to fly the Harrier for maximum effectiveness. You will also learn many facts about the AV8B Harrier simulation that are not mentioned in the manual.

Taking control of the campaign

To win the campaign, you must take control of all Harrier missions and troop landings. This means that you must delete all Harrier missions using the Battle Plan Control and fly them yourself via the Harrier icon. Before troops land, you must have operated a scorched earth policy to take out as many fixed targets as possible with your Harriers and helicopters.

At each Fleet Way Point (FWP) always give yourself several hours flying time by changing the departure time. This prevents the fleet sailing off and launching

the next missions before you have completed the current blitz on targets. Once you have finished or wish to carry on sailing, revise the departure time again.

On arrival at a new FWP, the battle plan immediately initiates the missions entered into the plan. To win it is important to realise that the first operation, without exception, is to send out helicopters to drop troops at locations with fixed targets. These troops will laser designate (LD) the fixed targets and make it much easier to hit them with the more accurate weapons like AGM-65 and laser guided bombs. Sometimes it can take a little while before the special forces become operational.

The messages on dropped forces are not always reliable and the only way of checking whether the Special forces are really operational is to go into the Intelligence window and check on the intelligence report for your chosen location. The wording "Special forces active in area" is a guarantee that targets will be laser designated. Once dropped these special forces will never be eliminated by the enemy.

The drop troop missions can be followed up by helicopter attack missions, either from the same FWP or

the next one. Introducing new FWP's can set up repeated attacks which are very effective and will take out fixed targets without any involvement by Harriers.

Use this technique for initiating attacks on heavily defended areas and/or targets a long way from the fleet, which are difficult to reach unscathed in a Harrier.

Once the helicopters have got your attack underway, the really serious business can be undertaken by Harriers, but remember to take care in deciding the target order. For example, the fuel dump at Baguia is in a valley which is guarded at its northern exit by a village. Obviously it's best to take out the enemy at this village before making attacks on Baguia.

Battle plan procedure

The procedure to be followed in putting together your battle plan should be to start from your last saved position.

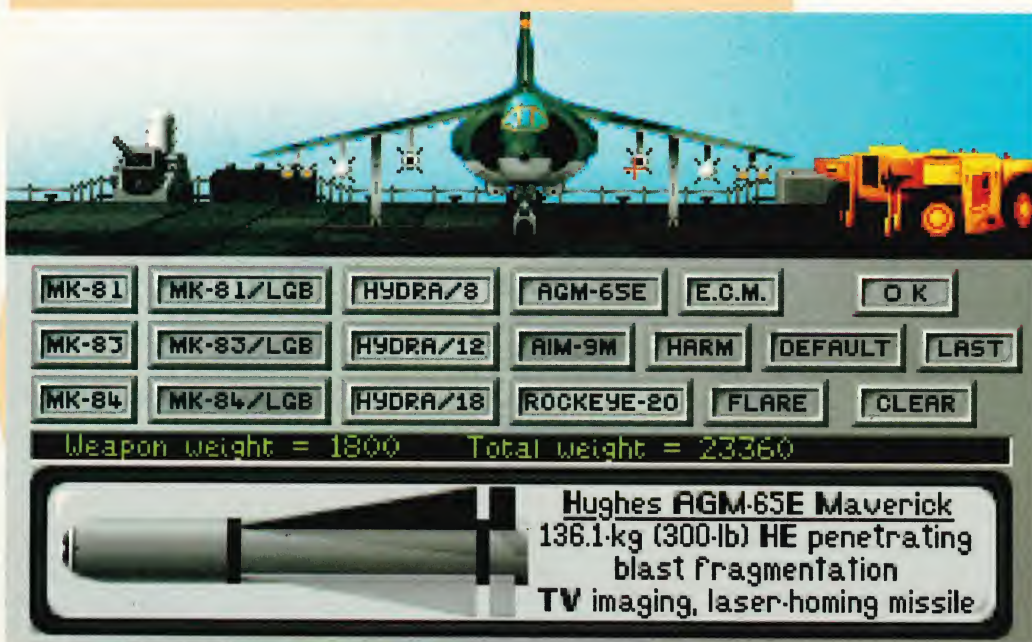
First look at any messages, click on the TAWADS console to get the island map and stop time. Survey the battleground for changes and open the intelligence icon to check targets (to see how many have been destroyed and how many remain).

Check whether special forces are in operation and using the battle plan icon delete any pre-planned Harrier missions and inappropriate troop landings. Insert helicopter missions and troop landings. Change the fleet departure time to allow plenty of time for your Harrier missions.

Exit to the TAWADS control room and save new missions. From the Harrier icon plan your next mission. Don't do more than one at a time or else Harriers will fly off on auto control and may not come back. Exit to the pilot briefing room, accept the mission, select armament and take off. Attack fixed targets and finally SAVE your position.

Saving

Saving your progress must become a habit. It is essential to start each mission with as many Harriers in reserve as possible. If you lose a Harrier, scrap the mission and return to the last save to restore it. After every successful attack you must immediately return to the Tarawa and save your success.





The only time you can accept a loss of a Harrier is when you have travelled a long way across the island, avoided the F16's and SAM's and managed to hit a difficult ground target, only to be zapped before you had any chance of returning to the Tarawa. You must preserve your Harriers as far as possible and not accept any unprofitable losses.

If you are concerned that the 10 slots are not going to be enough for your saves, help is at hand. Simply make a directory on a new formatted disk and call it DC1.

Now copy your existing hard disk saves (in the sub-directory DC) to the floppy disk. This will enable you to keep all your saved positions, but remember the save files take up around 500K so you won't get many saves per disk.

Arming and taking off

The only air-to-ground weapons that you will need to win the campaign are the AGM-65, HARM, AIM-9, HYRDA, the ECM pod and your guns. Fortunately, these weapons never run out.

The simplest way to take off is to release the brakes, hit full power and switch to auto just as the Harrier leaves the flight deck. It has the advantage of automatically raising your undercarriage, returning the nozzle angle to zero (if previously lowered) and setting you immediately on course for the target.

It is definitely worthwhile selecting your AIM-9 missiles on take off as enemy aircraft are liable to fly across your bows.

Flying to targets can be hazardous but a low level approach (500-600 feet) seems to do quite well. The auto pilot can be left on but you are better prepared to

take avoiding action if it is switched off once you have got the target direction. Speed up time with the X key, but don't be fooled into thinking that it is making the Harrier fly any faster. Remember the game is only compressing the time factor and you will be shot down that much quicker if you ignore the cockpit messages.

The software seems to allow less enemy air interference on the very first run to a target. Once the target has been approached and the enemy alerted, they become much more troublesome and difficult to shake off, even if you restart from a saved position. This is particularly true once you have got past the early stages of the campaign.

But if you have decided that you want to use freefall Rockeye bombs on a ground target then there is a rather easy way that you can

practice your aiming. To get some idea of how the bombs release and fall, make a low-level approach in your Harrier and as you get closer to the target, hit the "O" key and drop your bombs. In this way, you can watch how the bombs fall and hit the ground as the Harrier flies away. This camera view also provides the only way that you can see flares ejected from your aircraft.

Attacking air targets

In Harrier the principal targets which you will be attacking are: enemy aircraft and helicopters; fixed targets such as buildings, SAM sites including radar positions; troop vehicles and tanks.

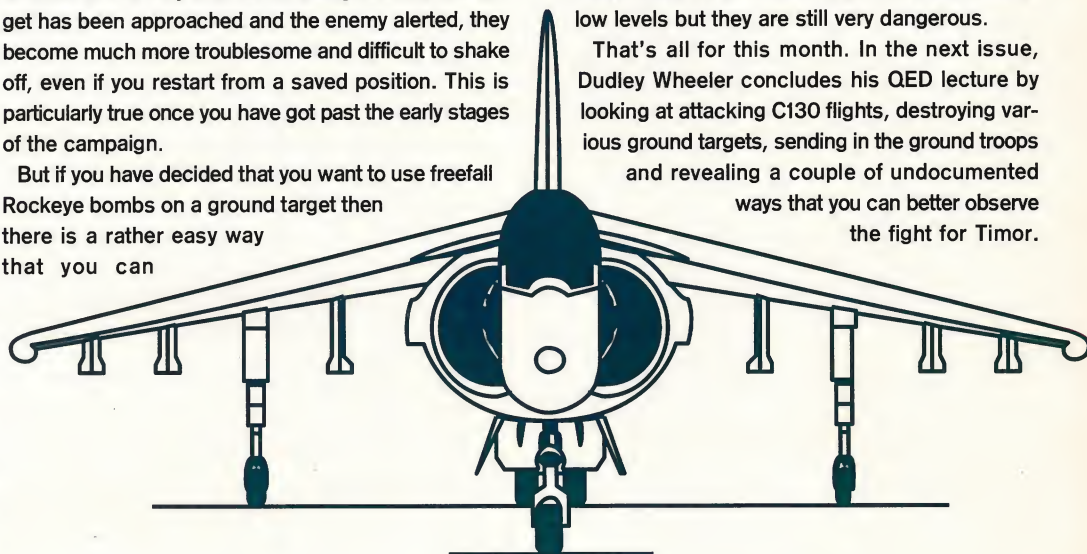
There is always a lot of danger from enemy air power, but the main emphasis of AV8B is to do whatever possible to get past these threats and to press home your attacks on the ground targets. Other flight simulators often concentrate on aerial combat, but AV8B is not one of them. Unlike a sim such as F15 III, your aircraft here have no attack radar – the radar that they do have can only provide messages about enemy positions at five second intervals.

Enemy fighters and helicopters also do not fly in continuously predictable patterns. They turn rapidly and high manoeuvres are quickly replaced with low ones. The AIM-9 missile is very effective but it's not always easy to get the enemy to fly across your "fire box".

If you want to practice your aerial combat techniques, try flying around the fleet at low-level when you are near Viqueque or make straight flights across the island. Unfortunately, shooting down enemy aircraft doesn't reduce their capability to attack or increase your % occupation score. Don't think that screaming up to 60,000 feet will provide a safe haven either, as attackers will appear at any altitude.

Helicopters, by comparison, will only be found at low levels but they are still very dangerous.

That's all for this month. In the next issue, Dudley Wheeler concludes his QED lecture by looking at attacking C130 flights, destroying various ground targets, sending in the ground troops and revealing a couple of undocumented ways that you can better observe the fight for Timor.





IMPORTANT - PLEASE NOTE
C = CGA (Colour Graphics Adaptor)
E = EGA (Enhanced Graphics Adaptor)
V = VGA (Video Graphics Array)
SV = Super VGA
256C = 256 colour
286/386 = Minimum machine requirement
MB = Minimum requirement of RAM
HD = High Density Disks
DUAL = Both 3.5" and 5.25" disks included
= NEW Item

688 ATTACK SUB EV/286	11.49
A-TRAIN CONSTRUCTION SET EV/286	12.49
A-TRAIN EV/286	15.99
A.T.A.C. V286	29.49
A320 AIRBUS (USA VERSION) V256C/286	27.49
ACES OF THE PACIFIC V256C/SV/386	27.49
ACES OVER EUROPE V256C/SV/386	28.49
AIR BUCKS EV/286	18.49
AIR FORCE COMMANDER EV/286	21.49
ALIEN 3 V286	21.49
ALIEN BREED V256C/286	20.49
ALONE IN THE DARK 2 V386/2MB	31.49
ALONE IN THE DARK HD V256C/386	28.49
AMERICAN GLADIATORS EV/286	27.49
ARCHER MACLEAN'S POOL V256	23.99
B17 FLYING FORTRESS V256C/286	17.49
BATMAN RETURNS V286	20.99
BATTLE ISLE 3 V286	18.49
BATTLE ISLE HD EV/286	16.99
BATTLEWINGS 1942 C/EV/286	11.49
BENEATH THE STEEL SKY V386	23.99
BONNAYAL AT THE DARK HD V256C/SV/386	28.49
BLOODWYCH C/EV/286	23.49
BLUE FORCE V286	24.49
BLUES BROTHERS C/EV/286	30.49
BURNING RUBBER V286	20.49
BUZZ ALDRIN INTO SPACE V256C/286	31.49
CAESAR DELUXE V286	21.49
CAMPAIGN 2 V286	25.99
CAPTIVE 2 - LIBERATION C/EV/286	23.49
CASTLES 2 EV/286	23.49
CHAMPIONSHIP MANAGER 93 UPDATE DISK C/EV/386	9.49
CHAMPIONSHIP MANAGER 93/94 C/EV/386	20.49
CHAMPIONSHIP MANAGER C/EV/286	11.49
CHESS MANIAC 5 BILLION AND 1 V256C/286	28.49
CHESSMASTER 3000 EV/286 (DUAL)	25.49
CIVILISATION V286	27.49
CORRUPTION (MISCROLLS) EV/286	27.49
CREEPERS V286	21.49
CRUISE FOR A CORPSE EV/286	12.49
CRYSTAL BALL V256C/286	14.49
CYBERSPACE V286	23.99
DANGER ZONE EV/286	14.49
DARKLANDS V256C/386	28.49
DAUGHTER OF THE SERPENTS V256C/286	26.49
DEAD LEADERS (MICROPROSE) V286	23.99
3D GOLF V256C/386/2MB	16.99
DAY OF THE TENTACLE V256C/286	28.49
DETROIT V286	21.49
DAVID LEADERS (MICROPROSE) V286	25.99
DREAMLANDS (TRANSARCTICA, STORM MASTER, ISHAR) EV/286	19.49
DREAMWEEB V286	23.99
DUNE 2 - BATTLE FOR ARRAKIS V256C/286	23.99
DUNE EV/286	14.49
DUNGEON MASTER EV/286	23.49
DYNASTY BLASTERS EV/286	23.49
ELITE 2 (FRONTIER) EV/286	23.49
ERIC THE UNREDEY EV/286	23.49
EUROPEAN CHAMPIONS EV/286	20.49
EYE OF THE BEHOLDER (SSI) EV/286	14.49
DAVID LEADERS (MICROPROSE) V286	25.49
EYE OF THE BEHOLDER 2 V256C/386	26.49
F1 (DOMARK) V286	21.49
F15 STRIKE EAGLE 2 C/EV/286	14.49
F15 STRIKE EAGLE 3 V256C/386/2MB	17.49
F16 FALCON V.3 V286/1MB/DOS	21.49
F19 STEALTH FIGHTER MCGA/EGA/VGA/286	13.49
FABLES & FIENDS - KYRANDIA 2 V256C/286	23.99
FABLES & FIENDS - KYRANDIA 2 V256C/286	23.99
LEGENDS OF KYRANDIA V256C/286	24.49
FANTASTIC WORLDS (REALMS, PIRATES, POPULOUS, WONDERLAND) EV/286	26.49
FIELDS OF GLORY V256C/386/2MB	26.49
FIRST SAMURAI EV/286	17.49
FLASHBACK V256C/286	25.49
FLIGHT SIM TOOL KIT (WINDOWS V3) V386	32.49
FLIGHT SIMULATOR 5 SV/386/2MB	31.49
FORGOTTEN CASTLE V256C/386	28.49
FORMULA 1 GRAND PRIX V286	19.99
FREDDY PHARKAS FRONTIER (MISCROLLS) V256C/386	26.49
FUTURE WARS C/EV/286	10.49
GATEWAY 2 V256C/286	23.49
GEAR WORKS EV/286	15.49
GLOBAL DOMINATION V286	21.49
GOAL V286	21.49
GOBLINS 2 V286	21.49
GRAHAM GOOCH WORLD CLASS CRICKET V286/22.49	22.49
GRAND PRIX CIRCUIT EV/286	10.99
GRAND PRIX UNLIMITED V286	23.49

GREAT NAVAL BATTLES HD V256C/286	25.99
GUNSHIP 2000 V286	23.49
HEROQUEST EV/286	10.49
HIREDS GUNS V286	28.49
HISTORY LINE 1914-18 V286	25.99
HOME ALONE 2 EV/286	18.99
HOOK V286	11.49
HUMANS 2 V286	20.99
IMMORTAL EV/286	10.49
INDIAN ADVENTURE V256C/386	24.99
INNOCENT V286	25.49
INTERNATIONAL RUGBY CHALLENGE V286	16.99
SHAR 2 - LEGIONS OF MADOS V256C/286	20.49
JACK NICKLAUS GOLF C/EV/286	5.49
JIMMY WHITES SNOOKER V286	18.99
JINXTER (MISCROLLS) EV/286	4.49
JORDAN IN FLIGHT SV/386	26.49
JURASSIC PARK V286	23.49
KASPAROV'S GAMBIT V386	28.99
KGB EV/286	24.49
KICK OFF 2 C/EV/286	13.49
KINGS QUEST 1 EV/286	11.49
KNIGHTS OF THE SKY EV/286	13.49
KRUSTY'S SUPER FUN HOUSE V286	21.49
LANDS OF LORE V256C/386	23.99
LASER SQUAD (ENHANCED) V286	21.49
LEATHER GODDESSES OF PHOBOS 2 EV/286	18.49
LEGEND (WORLD OF LEGEND) EV/286	15.49
LEGENDS (KRISALIS) V286	19.99
SHURE TONY LARRY V286	13.49
LEMMINGS C/EV/286 (DUAL)	13.49
LEMMINGS V286	26.49
LEMMINGS DATA DISK - OH NO! C/EV/286 (DUAL) 10.99	10.99
LETTA WAGON EV/286	18.49
LINKS (GOLF) (NORM) V286	11.49
LINKS 386 PRO V386	30.49
LITTL DEVIL V256C/386	25.49
LITTLE KINGDOMS V286	21.99
LOTUS 2 V286	20.49
LURE OF THE TEMPTRESS V286	24.49
M & M - DARKSIDE OF XEN V286	28.99
M1 TANK PLATOON EV/286	14.49
MAN UTD PREMIER LEAGUE CHAMPIONS V286	17.99
MANCHESTER UNITED C/EV/286	10.49
MEGA LO MANIA EV/286	17.49
MIG 25 V286	11.49
MIG28 (NIPDS) F16 FALCON V3 V286/1MB	18.49
MONOPOLY EV/286	22.49
MORTAL KOMBAT V286	23.99
NASCAR EV/286	14.49
NFL '94 V256C/386	25.99
NFL FOOTBALL V386	25.99
NHL ICE HOCKEY '94 V386/2MB	28.99
NIGEL MANSSELL'S WORLD CHAMPIONSHIP V286	20.49
NIPON SARES V286	12.49
PACIFIC STRIKE V256C/386/4MB	32.99
PATRICIAN V256C/386	22.49
PATRIOT V286	27.49
PEACEMAKER V286	23.49
PENAL DREAMS V286	19.99
POOL V286	23.99
POPULOUS & PROMISED LANDS EV/286	11.49
POPULOUS & SIM CITY C/EV/286	20.49
POPULOUS 2 V286	26.49
POWER TATICS (SHANGHAI 2, SARGON 5, BUSHBUCK, CHESSPLAYER 2100, PICK 'N' PILE) C/EV/286	22.49
PREMIER MANAGER V286	14.49
PRINCE OF PERSIA 2 V256C/286	26.49
PRINCE OF PERSIA C/EV/286	10.49
PRIVATEER V256C/386/4MB	15.49
PRO TENNIS TOUR 2 EV/286	14.49
PROTOTSTAR V286	25.49
QUEST & GLORY (BLOODWYCH, MIDWINTER, CADAVER, BAT) C/EV/286	17.49
RAQS TO RICHES V286	26.49
RAILROAD TYCOON DELUXE V/SV/386	25.99
RAILROAD TYCOON EV/286	11.49
RALLY V386	23.49
REACH FOR THE SKIES V286	24.49
RED BARON HD V256C/286	27.49
RETURN OF THE PHANTOM V286	26.49
RETURN TO ZORK V286	27.99
REX NEBULAR V286	29.49
RICK DANGEROUS C/EV/286 (DUAL)	9.49
RORKE'S DRIFT EV/286	8.99
RULES OF THE GAMMAGEMENT 2 EV/286	32.49
RYDER CUP V286	21.49
SCRABBLE (US GOLD) EV/286	20.49
SEAL TEAM V386	28.99
SECRET OF MONKEY ISLAND 2 V286	25.49
SECRET OF MONKEY ISLAND EV/286	13.49
SENSIBLE SOCCER EV/286	22.49
SEVEN CITIES OF GOLD V386	26.49
SHADOW CASTER V256C/386/4MB	28.99
SHADOW OF THE COMET V256C/286	28.99
SHADOW SORCERER EV/286 (DUAL)	6.49
SHADOWLANDS V286	10.49
SHUTTLE V286	20.99
SILENT SERVICE 2 V256C/386	13.99
SILVERBALL V386	19.99
SIM ANT V286 (DUAL)	24.49
SIM LIFE EV/286	27.49
SIMON THE SORCERER V286	26.49
SLEEPWALKER EV/286	26.49
SOCCKER KID V386	19.49
SOUP TREK (THE SEARCH FOR STOCK) VGA/286	19.99
SPACE CRUSADE EV/286	14.49
SPACE HULK V386	28.49
SPACE LEGENDS (WING COMMANDER,	

MEGATRAVELLER, ELITE PLUS) V286	24.49
SPACE QUEST 5 V256C/286	23.49
SPEAR OF DESTINY (WOLFSTEIN 3D) V256C/286	26.49
SPORTS MASTERS (PGA GOLF, MB, V500, ADVANTAGE TENNIS, EUROPEAN CHAMPIONS'S 1992) EV/286	23.49
STAR TREK 2 EV/286	26.49
STAR TREK (SPEECH) - 25TH ANNIVERSARY V256C/386/4MB	26.49
STAR TREK 2 - JUDGEMENT RITES V256C/386	26.49
STAR WARS CHESS V286	31.49
STARLORD V386	28.99
STONE KEEPER V256C/386	29.49
STREETFIGHTER 2 EV/286	20.49
STRIKE COMMANDER DATA DISK (TACTICAL OPERATIONS)	15.49
STRIKE COMMANDER SPEECH ACCESSORY V256C/386/4MB	14.49
STRIKE COMMANDER V256C/386/4MB	32.49
STRONGHOLD V386	23.99
STUART PEARCE'S SOCCER SELECTION'S (KICK OFF 2, MICROPROSE SOCCER, MANCHESTER UNITED, INTERNATIONAL SOCCER) EV/286	13.99
STUNT ISLAND V256C/386	30.49
STUNT WARS V386	28.99
STUNT WARS 2 V256C/386	20.49
SYNDCATE V256C/386/4MB	29.49
TASK FORCE 1942 V386/2MB	28.99
TEAM SUZUKI C/EV/286	10.49
THE BLUE & THE GREY V286	23.99
THE LOST TREASURES OF INFOCOM 1	21.49
THE LOST TREASURES OF INFOCOM 2	21.49
THE SETTLERS EV/286	25.99
THE SUMMONING EV/286	21.49
TORNADO V386	26.99
LOTUS 2 V256C/386 C/EV/286	10.49
TRANSACTICA V256C/286	18.49
TRODDERS VGA/286	20.99
ULTIMA 7 EV/286	26.49
ULTIMA 7 PART 2 - THE SERPENT ISLE V256C/386/4MB	29.49
ULTIMA TRILOGY 2 (ULTIMA 4, 5, 6) V256C/286/27.49	27.49
ULTIMA UNDERWORLD 2 V256C/386/4MB	26.49
ULTIMA UNDERWORLD V256C/386/4MB	26.49
WHEN TWO WORLDS WAR EV/286	23.99
WILSON GOLF V286	20.99
WING COMMANDER ACADEMY V256C/386/2MB	23.99
WIZARDRY 6 - BANE OF THE COSMIC FORCE C/EV/286	21.49
WIZARDRY 7 - CRUSADERS OF THE DARK SAVANT EV/286	29.99
X-WING DATA DISK V256C/386	15.49
X-WING V256C/286	30.49
XMAS LEMMINGS	15.49
ZOOL V286	17.49

CD ROM DRIVES

These multisection CD ROM drives are compatible with the Kodak Photo CDs. CD ROM games and will also play normal audio CDs. They are to MPC standards which mean they are compatible with all PCs. Soundcards. CDs can store up to 600 MB of data, making them the ideal media for games that have a large memory requirement. CD ROM games can offer fabulous graphics, sound and vast gameplay.

MITSUMI OU0065 INTERNAL CD ROM DRIVE FOR IBM PC, SLOTS INTO SPARE DRIVE BAY OF PC TO ALLOW USE OF CD ROM SOFTWARE. INTERFACE INCLUDED. EXCELLENT VALUE FOR MONEY CD ROM DRIVE. **159.99**

PANASONIC CR562B INTERNAL CD ROM DRIVE FOR PC. HIGH SPEED 320MB/SEC ACCESS, 300KB/SEC DOUBLE SPEED DATA TRANSFER RATE, INTERFACE INCLUDED, CD ROM XA & MULTISECTION COMPATIBLE. 5.25" HALF HEIGHT DESIGN. AUTOLOADING CD TRAY. **229.99**

PHILIPS CDD462 EXTERNAL CD ROM DRIVE **339.99**

20TH CENTURY ALMANAC	51.99
7TH QUEST VEGA 256 COL (GRAPHIC HORROR MYSTERY)	54.99
ANIMALS, GUIDE TO SAN DIEGO ZOO AND LOTS OF DIFFERENT ANIMALS	34.99
CUE N CUELOS (THE CREATURES WE LOVE TO LOVE)	45.99
KINGS QUEST 6	31.99
DAY OF THE TENTACLE	41.99
DINOSAURS - THE MULTIMEDIA ENCYCLOPEDIA	41.99
DISTANT SUNS FOR WINDOWS (DESKTOP PLANETARIUM)	76.99
ECO QUEST UNDERSEA ADVENTURE	33.99
GUINNESS DISK OF RECORDS. 1993 GROlier VERSION. LATEST UPDATE WITH NEW USER INTERFACE	39.99
RETURN OF ZORK	29.99
KINGS QUEST 5	29.99
LEGEND OF KYRANDIA VGA 256 COL	31.99
PROTOTSTAR	26.99
RINGWORLD	29.99
SOFTWARE TOOLWORKS STAR WARS CHESS	39.99
SPACE QUEST 4	26.99
THE KGB & CIA WORLD FACT BOOK	24.99
ULTIMA 1-6	27.99
WILLY BEAMISH	23.99
WING COMMANDER 2 DELUXE (WITH SECRET MISSIONS)	29.99
WING COMMANDER 2 WITH SPEECH	31.99
WING COMMANDER 2 DELUXE (WITH SECRET MISSIONS)	29.99
WING COMMANDER AND ULTIMA 6	15.99

ADJ ENGLISH (11-12 YRS) C/EV (DUAL)	17.49
ADJ ENGLISH (12-13 YRS) C/EV (DUAL)	15.99
ADJ FRENCH (11-12 YRS) C/EV (DUAL)	17.49
ADJ JUNIOR COUNTING (4-5 YRS) C/EV	14.99
ADJ JUNIOR READING (4-5 YRS) C/EV	14.99
ALVIN'S PUZZLES (6-8 YRS) EV	14.49
FLYING FINGERS KEYBOARD TUTOR	25.99
FUN SCHOOL 2 (6-8) C/EV/286	10.49
FUN SCHOOL 2 (6-8) C/EV/286	10.49
FUN SCHOOL 2 (6-8) C/EV/286	10.49
FUN SCHOOL 3 (6-7 YRS) C/EV	15.49
FUN SCHOOL 4 (2-5 YRS) C/EV	17.49
FUN SCHOOL 4 (5-7 YRS) C/EV	17.49
FUN SCHOOL 4 (7-9 YRS) C/EV	17.49
FUN SCHOOL SPECIAL - MERLIN'S MATHS (7-11 YRS) C/EV	17.49
FUN SCHOOL SPECIAL - PAINT 'N' CREATE EDUCATIONAL ART (5-9 YRS) C/E	17.49
FUN SCHOOL SPECIAL - SPELLING FAIR (7-13 YRS) C/EV	17.49
MARIO IS MISSING V. EXCELLENT GRAPHICALLY EDUCATIONAL GAME FOR ALL AGE GROUPS.	29.49
MAVIS BEACON 2 TYPING TUTOR C/EV	25.49
MICRO ENGLISH (8 YRS) TO GCSE, CONFORMS TO NATIONAL CURRICULUM) C/EV	18.49
MICRO FRENCH (BEGINNER TO GCSE, CONFORMS TO NATIONAL CURRICULUM) C/EV	17.99
MICRO GERMAN (BEGINNER TO GCSE AND BUSINESS LEVEL, CONFORMS TO NATIONAL CURRICULUM) C/EV	17.99
MICRO MATHS (11 YRS) TO GCSE, CONFORMS TO NATIONAL CURRICULUM) C/EV	17.99
MICRO SPANISH (BEGINNER TO GCSE, CONFORMS TO NATIONAL CURRICULUM)	15.99
NODDY'S BIG ADVENTURE (FOLLOW UP TO NODDY'S PLAYTIME)	21.49
NODDY'S PLAYTIME (EDUCATIONAL PROGRAM FOR CHILDREN AGED 3+)	21.49
SHOPPING BASKET (6-8 YRS) V	14.49
STORYBOOK WEAVER (EDUCATIONAL AND CREATIVE WRITING TOOL USING PICTURES, SOUNDS AND SONGS)	17.99
1ST DESIGN ART AND WORD PROCESSING PROGRAM	
IDEAL ENTRY LEVEL PACKAGE FOR WINDOWS ART AND DESIGN	38.99
1ST PRESS AND 1ST DESIGN DOUBLE PACK. COMBINED PACKAGE FOR EVERYTHING YOU WILL NEED FOR YOUR PERSONAL DESIGN STUDIO.	61.99
1ST PRESS PAGE LAYOUT PROGRAM. IDEAL ENTRY LEVEL DESKTOP PUBLISHING PROGRAM FOR BEGINNERS.	38.99
3D CONSTRUCTION KIT 2 EV	33.49
BBC GARDENERS WORLD 3D GARDEN DESIGNER	15.99
BOOM BOB INTERACTIVE MUSIC PROGRAM (REQUIRES SOUND CARD)	40.49
DESIGNWORKS DESKTOP PUBLISHING PROGRAM. MORE COMPLEX VERSION OF 1ST PRESS AND 1ST DESIGN PACKAGE. IDEAL FOR MORE DETAILED DESIGNS.	83.99
EDUCATIONAL SPECIAL - PAINT 'N' CREATE EDUCATIONAL ART (5-9 YRS) C/E	17.49
KID PIX	24.49
MAVIS BEACON 2 TYPING TUTOR C/EV	25.49
MICROSOFT MONEY ACCOUNTS PACKAGE. IDEAL FOR SMALL BUSINESS OR HOME USE. WINDOWS REQ'D.	37.49
MICROSOFT WORKS V3 DOS (A POWERFUL BUSINESS TOOL INCLUDING A DATABASE FOR INSTANT REPORTS, SPREADSHEETS AND CHARTING (31 CHART TYPES), WORD PROCESSOR WITH 120,000 WORD SPELL CHECKER, A THESAURUS WITH OVER 190,000 SYNONYMS AND A DRAWING FUNCTION)	111.99
MINI OFFICE PERSONAL (SUGGESTED FOR SMALL BUSINESSES OR HOME USE. INCLUDES WORD PROCESSOR, WITH 50,000 WORD SPELL CHECKER, DATABASE, SPREADSHEET WITH MORE THAN 50 FUNCTIONS AND LABEL PRINTER.)	26.49
MS-DOS 6 UPGRADE (MICROSOFT)	57.99
PRINT SHOP DELUXE. EXCELLENT PRINT ENHANCER GIVES SUPERB QUALITY PRINTING RESULTS. ALLOWS CALENDARS, GREETING CARDS ETC TO BE PRINTED	39.99
VISTA PRO VERSION 3 (LANDSCAPE SCENERY GENERATOR)	69.99

GAMES CARDS

QUICKSHOT 163 SMART GAMES CARD FOR PC 386/486 MODELS. 2 X 15 PIN JOYSTICK PORTS, AUTOMATIC CLOCK SPEED DETECTION AND SELECTION, HOT KEY PROGRAM FOR CLOCK SPEED TUNING, SOFTWARE SELECTABLE. **10.99**

QUICKSHOT PC GAMES CARD + 113S JOYSTICK. TWIN PORT PC GAMES CARD WITH 113S PC ANALOGUE JOYSTICK (15 PIN) **16.99**

MISCELLANEOUS

3.5" DISK HEAD CLEANER **4.49**

SCREEN FILTER (GLASS) FOR 14" TV OR MONITOR. CUTS DOWN GLARE AND STATIC FROM MONITOR. **34.99**

SWITCHER BOX FOR PC. CONNECTS TWO PRINTERS OR TWO PERIPHERALS TO PARALLEL PRINTER PORT. MANUAL SWITCHER. REQUIRES SWITCHER LEAD **18.99**

SPEAKERS

SCREENBEAT STEREO SPEAKERS FOR PC. REQUIRES 4AA BATTERIES OR MAINS ADAPTOR. DESIGNED SPECIFICALLY FOR COMPUTERS, INCLUDING MOUNTINGS FOR ATTACHMENT TO MONITOR. **18.99**

SCREENBEAT MAINS ADAPTOR FOR SCREENBEAT SPEAKERS **7.99**

SOUNDBLASTER STEREO SPEAKERS. SUITS ANY SOUND CARD WITH 3.5MM JACK PLUG. **4.99**

LEADS

DATA CABLE - PC TO MACINTOSH (8 WAY MINI DIN TO 9 WAY P FEMALE) **12.99**

MAINS CABLE - PC BASE UNIT TO MONITOR **7.99**

MONITOR EXTENSION CABLE FOR PC (9 WAY) **7.99**

PRINTER LEAD (PARALLEL) 1.5 METRES FOR PC **7.99**

SWITCHER LEAD (STRAIGHT THROUGH CABLE). CONNECTS PC TO SWITCHER BOX. 1.8 METRES PARALLEL (MALE TO MALE 25 WAY D CONNECTORS) **9.99**

SOUND CARDS



ORIGINAL BEST SELLER
SOUND BLASTER V.2 SOUND BOARD FOR PC WITH INBUILT ANALOGUE (15 PIN) JOYSTICK PORT, MIDI INTERFACE AND CD AUDIO INPUT SOCKETS. COMPLETE WITH SOFTWARE BUNDLE INCLUDING LEMMINGS, INDY 500, ORGAN AND TALKING PARROT. 1 YEAR WARRANTY. **NEW LOWER PRICE** **64.99**



COMPLETE STARTER PACK
QUICKSHOT PC STARTER PACK WITH SOUND BLASTER 11 VOICE MUSIC/DIGITISED VOICE/MIDI SOUND BOARD WITH INBUILT ANALOGUE (15 PIN) JOYSTICK PORT, QS123 WARRIOR 5 JOYSTICK AND MATCHING IVORY COLOUR SPEAKERS. **69.99**



COMPLETE WITH MINI SPEAKERS
GALLANT SC3000 SOUND BOARD FOR PC. COMPATIBLE WITH SOUNDBLASTER V.2 AND ADLIB CARDS. COMPLETE WITH MINI SPEAKERS, MICROPHONE AND BUILT-IN MPU-401 MIDI INTERFACE. GALLANT MASTER VOICE KIT UTILITY SOFTWARE INCLUDED. 1 YEAR WARRANTY. **74.99**



THE ULTIMATE GAMESPLAYERS PACK
SOUND SENSE SOUND BOARD FOR PC. COMPATIBLE WITH SOUNDBLASTER V.2 AND ADLIB CARDS. COMPLETE WITH HIGH QUALITY SPEAKERS, BUILT-IN MIDI INTERFACE AND CD AUDIO INPUT SOCKETS. FREE ZOOL, AV98 HARRIER ASSAULT AND INDIANA JONES GAMES. 1 YEAR WARRANTY. **96.99**



COMPLETE STARTER PACK
SOUND BLASTER STARTER PACK (SOUND BLASTER V.2 SOUND BOARD, MACH 1 JOYSTICK (15 PIN), TWO PRO DIGITAL SPEAKERS). INCLUDES EVERYTHING NEEDED TO CONVERT A PC INTO A FIRST CLASS GAMES MACHINE. **99.99**



WITH CD-ROM INTERFACE
SOUND BLASTER PRO PLUS SOUND BOARD FOR PC INCLUDES CD-ROM INTERFACE, MIDI INTERFACE, DIGITAL & ANALOGUE MIXER, AMPLIFIER AND SOFTWARE. **NEW LOWER PRICE** **142.99**



3D HOLOGRAPHIC SOUND 16-BIT
GRAVIS ULTRASOUND 16 BIT SOUND CARD FOR PC. COMPATIBLE WITH ADLIB AND SOUNDBLASTER CD QUALITY SOUND, 3D HOLOGRAPHIC SOUND CAPABILITY, FULL MIDI SUPPORT, WINDOWS SUPPORT, JOYSTICK PORT, 4 SOUND UTILITIES, SUITS 386 OR ABOVE **165.99**



COMMODORE 1940 MONITOR FOR PC

SUPPORTS SVGA, 0.39" DOT PITCH, 14" DISPLAY, BUILT IN STEREO SPEAKERS FOR QUALITY SOUND. PC LEAD WITH AMIGA ADAPTOR INCLUDED. OFFICIAL UK VERSION **284.99**

AMSTRAD MEGA PC 386 1/40

WITH VGA MONITOR AND BUILT IN MEGADRIIVE. 25MHz 386 PC, 14" COLOUR VGA MONITOR, 40MB HARD DRIVE, 1 MEG RAM, 1 YEAR ON-SITE WARRANTY, DOS 5, ANALOGUE JOYSTICK, ADLIB SOUND CARD, SPEAKERS, MOUSE & CONTROL PAD **499.99**



PC MICE

DATALUX MOUSE FOR PC (400 DPI, CLEAR DESIGN) **17.49**

LEGEND TRACKBALL FOR PC. REPLACES STANDARD MOUSE FOR ALL MOUSE BASED OPERATIONS. COMFORTABLE, ERGONOMIC FEEL. SUITED MAINLY TO RIGHT HANDED USERS. **25.99**

RSD TRUEMOUSE FOR PC. 3 BUTTON MICROSOFT SERIAL/PC COMPATIBLE. 100-800 DYNAMIC RESOLUTION. DRIVERS/SOFTWARE ON 3.5" DISK. FITS 9 WAY SERIAL PORT. **12.99**

TROJAN LIGHT PEN FOR PC (COMPATIBLE WITH 286 OR ABOVE, NOT MICROCHANNEL) WORKS WITH MOST WINDOWS AND DOS APPLICATIONS. EXCELLENT FOR DESIGN AND EDUCATIONAL USE **99.99**



We only supply official UK products. Official suppliers of all leading brands. We sell games and peripherals all at amazing prices for Megadrive, Master System, Game Gear, Super NES, Gameboy, NES, Lynx, Amiga, Atari ST, PC, CD ROM and Apple Mac. And we sell T-shirts and cuddly toys!

Special Reserve Club Shops at The Maltings, Sawbridgeworth, Herts & at 43 Broomfield Road, Chelmsford, Essex. Club Shops open 10am til 8pm seven days a week!



PC JOYSTICKS

CH FLIGHT STICK ANALOGUE JOYSTICK FOR PC (15 PIN) GG6683 34.99



FREEWHEEL STEERING WHEEL (ANALOGUE 15-PIN) FOR PC. USE IT INSTEAD OF A JOYSTICK. SUITS MOST DRIVING GAMES GG9006 29.99



GRAVIS ADVANCED GAME PAD FOR PC (15 PIN) 20.49



GRAVIS ANALOGUE JOYSTICK FOR PC (15 PIN) 29.99



KONIX SPEEDKING FOR PC WITH AUTOFIRE (DIGITAL, 15 PIN) 12.99



LOGIC 3 DELTA RAY JOYSTICK FOR PC (15 PIN) 12.99



LOGIC 3 PINTO JOYSTICK FOR PC (AUTOFIRE, 15 PIN) 17.99

LOGIC 3 QUATRO JOYSTICK FOR PC (AUTOFIRE & SLOW MOTION, 15 PIN) 17.99

QUICKJOY SPEED RAIDER JOYSTICK FOR PC (AUTOFIRE, 15 PIN) 13.99



QUICKJOY TOPSTAR JOYSTICK FOR PC (AUTOFIRE, 15 PIN) 17.99

QUICKSHOT 123 WARRIOR 5 PC ANALOGUE JOYSTICK (15 PIN) 11.99



SAITEK MEGAGRIP 3 PC ANALOGUE JOYSTICK (AUTOFIRE, 15 PIN) 12.99



SAITEK MEGASTICK 3 PC DIGITAL JOYSTICK. (15 PIN) 8.99



SUNCOM ANALOGUE EXTRA JOYSTICK FOR PC (15 PIN) 24.99



SUNCOM FX2000 ANALOGUE JOYSTICK FOR PC (AUTOFIRE, 15 PIN) WITH SWITCHABLE FIRE BUTTONS 24.99



SUNCOM G FORCE YOKE ANALOGUE PC JOYSTICK (15 PIN). RESPONSIVE CONTROL STICK SUITABLE FOR USE WITH DRIVING GAMES AND FLIGHT SIMS. 59.99



DISKS & DISK BOXES

10 PACK GOLDSTAR 5.25" DSDD DISKS (96 TPI, 720K)2.99
10 PACK GOLDSTAR 5.25" HD DISKS (1.2 MB)3.99

PACK OF 10 VERBATIM DSDD 3.5" DISKS WITH LABELS (BRANDED)6.49
PACK OF 10 TDK MF-2DD 3.5" DISKS (DSDD BRANDED)7.99
PACK OF 50 SONY DSDD 3.5" DISKS WITH LABELS22.99

PACK OF 10 SONY HIGH DENSITY 3.5" DISKS WITH LABELS AND FREE PLASTIC FLIP TOP DISK BOX7.99
PACK OF 10 TDK MF-2HD 3.5" DISKS (HIGH DENSITY BRANDED)12.99
PACK OF 50 SONY HD 3.5" DISKS WITH LABELS29.99

BANX DISK BOX 3.5" (80) STACKABLE13.99
DELUXE DISK BOX 3.5" (80), LOCKABLE, DIVIDERS9.99
DISK BOX 3.5" (120) LOCKABLE, DIVIDERS9.99
DISK BOX 3.5" PLASTIC FLIP TOP (10 CAPACITY)2.49



Special Reserve members can have all this... can YOU?

READ "NRG" Regular Club Magazine

CHOOSE from our Huge Selection

BUY at Best Possible Prices

SAVE with our Special Deals

SAVE more with our XS Coupons

WIN up to £60,000 worth of prizes FREE

JOIN now from just £4.00

We only supply members but you can order as you join

There's no obligation to buy and you can be any age. Just send in the form below or phone Sales on 0279 600204.

As a member of Special Reserve you'll receive regular issues of NRG magazine. NRG is our 48 page colour club magazine sent bi-monthly only to Special Reserve members. NRG contains:

1. The best selection of games, peripherals and hardware for all popular formats. We are official Sega, Nintendo and Sony stockists.
2. Reviews in colour and latest information on new products
3. Charts and Release Schedule, to help you choose and plan
4. The best prices. Just one purchase can save you your joining fee
5. Hundreds of Special Offers. Top games at prices you won't believe
6. XS Super Savers. Money-off coupons worth over £180 a year
7. FREE-to-enter BIG TARGET COMPETITIONS. With currently up to £10,000 worth in every issue of NRG, exclusive to members.

That's why over 180,000 people have joined Special Reserve, the biggest games club in the World!

0279 600204

Open 10am til 8pm Seven Days a Week.

Order/Confirmation/Receipt sent for every order.

You can also Fax your order to us on: 0279 726842

We pride ourselves on our after-sales service. (18 customer service lines) Inevitably some games listed may not yet be available. Please phone sales on 0279 600204 to check availability before ordering. In the event of delay we issue refunds on request at any time prior to despatch. We reserve the right to change prices without prior notification. E. & O.E.

Registered Office: Inter-Mediate Ltd, 2 South Block, The Maltings, Sawbridgeworth, Herts. CM21 9PG.
Club Shops at Sawbridgeworth (address above) and at 43 Broomfield Road, Chelmsford, Essex.

All prices include VAT and carriage to UK mainland. See base of order form for overseas surcharges. We supply hardware only to UK mainland addresses.

MEMBERSHIP FEES	6 MONTHS TRIAL MEMBERSHIP	ONE YEAR ANNUAL MEMBERSHIP	TWO YEARS WITH FREE HARD BINDER
UK MEMBERS	4.00	7.00	14.00
OVERSEAS EC MEMBERS	6.00	9.00	18.00
OVERSEAS WORLD MEMBERS	7.00	11.00	22.00

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN. THERE ARE NO SURCHARGES ON TELEPHONED ORDERS (UK) (PLEASE PRINT IN BLOCK CAPITALS) **CORK**

Name _____

Address _____

Postcode _____

Phone _____ Machine _____

Enter membership number (if applicable) or **NEW MEMBERSHIP FEE (ANNUAL UK 7.00)**

item _____
item _____
item _____
item _____

ALL PRICES INCLUDE UK POSTAGE & VAT £ _____

Cheque/P.O./Access/Mastercard/Switch/Visa (Switch Issue No _____)

Card expiry date _____ Signature _____

Cheques payable to: **SPECIAL RESERVE P.O. BOX 847, HARLOW, CM21 9PH**

Overseas Orders Surcharge (EC or World): Software orders please add £2.00 per item. Non-software items please add 25%. Hardware items supplied to UK mainland only. Overseas orders must be paid by credit card.

Blue Force

QED

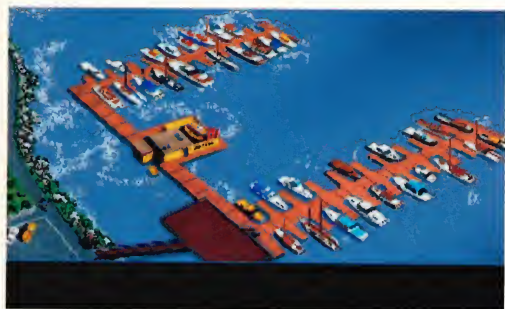
Evening all – Robin Matthews patrols the first half of Tsunami's Blue Force



The police station is a cop's second home.

The latest graphic adventure from Jim Walls (of Sierra's Police Quest fame) is another cops and robbers scrape with the emphasis on following general and specific official police procedures. Now available on both disk and CD-ROM, here is a rookie cop's handy guide to the very first shift.

The intro sets the scene with a flashback to a drug deal and the murder of Irish American John Patrick Ryan and his wife – your adopted parents. Blue Force then gets under way, with you playing the role as rookie motorcycle cop Jake Ryan on his first day on patrol. Fresh from the Police Academy (is that where they make those films?), you walk into your new station and go in true Hill Street Blues fashion for your debut briefing. You are given a roving brief, but note the burgarly at the military armoury – and make sure you don't forget to pick up that musical score.



Quiet and picturesque. No danger here – surely?

Next, leave the building through the south-west exit and climb on the right hand side motorbike. Before you ride off, however, open up the glove compartment and take out two items – a ticket book (for handing out citations like parking tickets), and your Miranda Card. This card takes its name from a famous case in American jurisprudence which introduced a transatlantic version of the 'caution', ie, anything you say may be taken down ... and used against you in evidence or in a cops and robbers film or crime re-enactment series on the TV.

Cruise around Jackson Beach, eventually cracking your first big case and issuing one of those citations. You'll now get a radio crime report and be pointed to the marina. Full throttle and, upon arrival, call in with a 10-97, then check with the woman and child. Evil's afoot! especially when you hear a shot. Now a fundamental principle of US law enforcement is to 'be careful out there', so call in again and request back-up via code 10-35. Return to the witnesses and keep talking until your partner arrives.



Shots ring out: time for spontaneous heroism.

Tell Doug the story so far and then walk down the pier. Board the yacht but before knocking doors load your pistol and have it drawn and ready (the trick here is to transfer the ammo clip into the pistol, grab the pistol and 'use' it on yourself). Doug's a real copycat so by now you should both be tooled up.

Knock-knock (twice) and when it comes down to a showdown the word is mightier than the sword. Don't give up your piece and consider getting a new partner – what a prat! Handcuff the villain after he's seen the error of his ways, then search him, the room (in particular the bed) and 'Mirandise' him using the card. You have started your life in law enforcement more quickly than you could say "Book him, Dougie" and finally give solace to the former hostage. Back to your trusty steed and then radio in again. Use codes 10-27, 10-15 and 10-98.



Using correct police procedure, storm the boat.



Traffic duty. The life of a cop isn't glamorous.

Mr Green should be processed now, so head for the city clink straightaway and go through the door to the left (try your chat-up line if you want, but you won't get far, I promise).

Take a booking slip from the holder on the wall, and use Green's licence to find the details you need to complete the slip. Hand in the form to the custody officer and then head back to HQ.

At the station, file the booking form in Sergeant Sutter's mail tray and hand in all the case evidence to Barry. Make sure that you check out the bulletin board every time you are in this area.

Back out on the streets until you get another call: this time it's for a downtown area that's pretty tough. Radio for back-up using code 10-97 and 10-35. Assistance is immediate, enabling you to cuff homey #1 safely, search and then 'Mirandise' him. Talk to homey #2, get Doug to do his bit and put them in the squad car. Now search the truck and recover three pieces of evidence, one in front, two behind.

After the search, radio in with 10-98, 10-27 and 10-15. Go directly to jail and repeat the booking procedure with the new customer. Head back to the station, file the paperwork and hand in the goodies to the property officer. A policeman's work is never done!

POLICE RADIO CODES IN BLUE FORCE

10-1	Radio reception poor
10-2	Radio reception good
10-4	Received message
10-13	Weather check
10-15	Prisoner in custody
10-27	Subject check
10-35	Back-up requested
10-97	Arrived at scene
10-98	Cleared scene:available for call
10-99	Emergency: officer needs assistance
11:00	Closing time

sinclair

DIRECT



PC TITLES

Aces Over Europe	£31.99
Alien Breed	£21.99
B17 Flying Fortress	£19.99
Battle Isle 93	£19.99
Betrayal at Krondor	£31.49
Civilisation	£24.99
David Leadbeters Golf	£14.99
Day of the Tentacle	£29.99
Dune 2	£24.99
F15 Strike Eagle 3	£19.99
Falcon 3.0	£19.99
Fields of Glory	£31.49
Flashback	£27.99
Flight Sim 5	£33.99
Formula 1 Grand Prix	£26.99
Gunship 2000	£28.99
Harrier Jump Jet	£19.99
Indiana Fate of Atlantis	£26.99
Jimmy Whites Snooker	£19.99
Lemmings 2	£28.99
Links Pro 386	£31.99
Lost Vikings	£25.99
Manchester United Europe	£14.99
Napoleonic	£19.99
PGA Tour Golf Plus	£25.99
Pinball Dreams	£24.99
Pool	£19.99
Premier Manager 2	£24.99
Prince of Persia 2	£28.99
Privateer	£35.99
Railroad Tycoon Deluxe	£25.99
Rex Nebular	£18.99
Return to Zork	£29.99
Scrabble	£23.99
Secret of Monkey Island 2	£27.99
Sensible Soccer 92/93	£24.99
Shadow of the Comet	£19.99
Sim City Deluxe	£22.99
Sim Farm	£24.99
Simon Sorcerer	£29.99
Space Hulk	£31.99
Star Wars Chess	£35.99
Street Fighter 2	£21.99
Strike Commander	£33.99
Stunt Island	£33.49
Summer Challenge	£24.99
Super Tetris	£26.99
SVGA Warrior	£19.99
Syndicate	£31.49
Task Force	£19.99
Tomado	£31.49
Ultima Underworld 2	£29.99
Wing Commander Academy	£25.49
X Wing	£31.99
X Wing Mission Disk	£15.99
Zool	£19.99

LATEST RELEASES

No-one receives games before us!
Phone now for info. on these new releases

Goal	£21.99
Lands of Lore	£24.99
Mig 29 (requires Falcon 3)	£17.99
NFL Coaches Club Football	£28.99
Pirates Gold	£28.99
Speed Racer	£28.99
Star Lord	£28.99
Ultimate Pinball Quest	£20.99

CD ROM

7th Guest	£44.99
Cyber Rose	£39.99
Day of the Tentacle	£32.99
Dinosaurs	£41.99
Dune	£35.99
Indy Jones Fate of Atlantis	£32.99
Jurassic Park	£28.99
Kings Quest 6	£35.99
Laura Bow 2	£31.99
Lovers Guide	£29.99
Microcosm	£39.99
Return to Zork	£39.99
Ringworld	£29.99
Sherlock Holmes 3	£34.99
Shuttle	£36.99
Star Trek	£39.99
Strip Poker	£25.99

EDUCATIONAL

Flying Fingers Tutorial	£24.99
Fun School 4 (5-7)	£18.99
Fun School 4 (7-11)	£18.99
Fun School Maths	£18.99
Fun School Spelling	£18.99
Mickey's ABC	£16.99
Paint and Create	£18.99

PERIPHERALS

Sound Blaster Pro	£149.99
Sound Blaster V.2	£69.99
Screen Beat Speakers	£18.99
CH Flight Stick Joystick	£35.99
Freewheel Steering Wheel	£29.99
Gravis Joystick (Black)	£29.99
Warrior 5 Joystick	£13.99
PC Logic 3 Mouse	£12.99
10 TDK HD 3.5 Disks	£ 9.99
Precision HD 3.5 Disks	£ 7.99
40 Capacity Disk Box	£ 4.99
Banx Disk Box (80)	£12.99
Mouse Mat	£ 0.99

MAIL ORDER WITH INTEGRITY!

With Sir Clive Sinclair as Director and son Crispin Sinclair as Managing Director.

With the Sinclair name as your guarantee you can order with confidence, while our Helpline stands as your assurance of reliable professional service.

Whatever your problem, at Sinclair Direct we want to help. So if in doubt call us!

Call now and get your copy of our fantastic colour brochure, Packed full of recommendations, reviews, ratings and details on all our products & services.

**MOST ORDERS
DISPATCHED
WITHIN 48 HOURS**

**MANY MORE
TITLES IN STOCK
PHONE FOR
DETAILS**

**CALL US NOW FOR SAME DAY DESPATCH
OR FOR OUR HELPLINE
AND WE WILL SEND YOU OUR FREE
COLOUR BROCHURE**

071 263 3529

Send orders by mail to: Sinclair Direct, P.O.Box 3601, London N19 3HW, or Fax on: 071 272 5553.

Name	Item	£
Address	Item	£
Post Code	Item	£
Make payments to: SINCLAIR DIRECT LTD.		
We accept Access <input type="checkbox"/> VISA <input type="checkbox"/>		
Card No.	(If you require CD Format please state with title)	P&P Total £
.....		TOTAL £
Card Expiry Date	Please tick if you do not want to be on our mailing list. <input type="checkbox"/>	
Signature	Post and Packing per item UK First Class £ 1.80 per item, 2nd Class £1.50 per item, EEC Post £3.00 per item, Non EEC Post £6.00 per item.	



Do not attempt the tips marked with this icon unless you are sure you understand what you are doing. In any case, it's sensible to make back-ups of the files before

you start tinkering around with program editors. PC Review is not going to accept any responsibility for damage to data incurred when trying out tips, so be warned! Send all your cheats to QED Tips at the usual PC Review address. We'll print as many as possible each month and the sender of the highlighted Star Tip wins a software prize - so don't forget to include details of your PC's configuration with your letter.

Privateer



Sucking vacuum in Privateer? Fed up with trading iron for only a small profit? Well, now privateer extraordinaire, Simon Hathaway, comes to the rescue with a cheat that makes Origin's latest game a lot more fun to play.

If you've been playing Privateer, you'll no doubt be aware that new ships cost a lot of money, up to 200,000 credits in some cases. Well, if you're confident hacking and changing the odd bit of game code, here is a way to get 5,000,000 credits, enough money to buy you anything; Centurion starfighter, plasma guns, rear turrets, engine upgrades, the works.

Start the game as usual and select a new game from the option screen. Go to your hand-held computer and save the game. Call it 'Start'. Now exit the game using the key combination Alt-X.



Using a disk editor (such as PC Tools, Norton Utilities, Xtree Gold, etc) edit the saved file Start.sav. Find hex address 306 and change the line to read 40 4B 4C. Then save the changes and exit the editor.

Now simply restart Privateer and load the game Start. Look at your hand-held computer and click on FIN. You'll now see that you have in excess of 5,000,000 credits which, as I have mentioned, will allow you to buy any of the ships and any of the weapons. Simply experiment until you find the combination which is right for you.

If you haven't been there already, head for New Detroit to see Sandoval in the bar. He will offer you a simple mission which leads on to the central part of the game. There are about 22 missions in Privateer leading slowly upwards to a finale with that glowing alien ship you saw in the intro. Lastly, remember if things get too hot, hit those afterburners and run away!

Indy and the Fate of Atlantis

For those of you still stumbling through LucasArts' movie adventure (I know there's a fair few of you), here is a list of all the objects you're going to need to find (and how to use them) in the highly frustrating maze section.

A bronze spoked wheel which is in the room with robot parts in it.

A bronze gear wheel in a similar room.

A statue head (a strange mix of a bull and a fish).

A coiled eel like the one found in Iceland.

A rib-cage found at one of the cave-ins in the outer corridor.

A cup. In the statue room use the ladder across the hole to get it.

In the lava room, use the cup with the pedestal and the statue head with the plaque.

In the machine room use the bronze spoked wheel with the peg and then use the cup of lava with the funnel at the top. Pick up the beads and the wheel.

At the high vent looking in on the dungeon, use a bead with the sentry statue to kill the guard.

In the crab room, use the bratwurst with the rib-cage and then use both with the pool to catch a crab.

In the sentry room, use a bead with the eel and then use a bead with the fish statue.

HELP WANTED

Curse of Enchantia

In Curse of Enchantia I am stuck in all the caves. I have with me a paper clip, coin, pendant, monitor and a branch. Please help!

Christopher Endicott
Crawley

Eye of the Beholder II

I can't get off the first level. I've uncovered the dungeon area and there's two locked doors. Upstairs there is also two locked doors, one with a mouth in it. How do I get them open?

Christian Taylor
Brighton

Eternam

An issue or two ago, Jim Meadows was having a few problems in Eternam, the weird but very wonderful game from Infogrames. Thankfully, Sam 'Captain Blood' Jeffreys comes promptly to his rescue. If there's anyone else who can't get on to the ferry, listen up.

To get on the ferry you must obtain two passes, one from each of the brothers who rule the island. Go to the first brother's house (the one with the guy playing the piano), talk to him and he'll ask you to spy on his wife. Go into her room with the camera and hide behind the screen. When she starts her evil business use the camera to film it. Take the camera to the baron and he'll give you the pass.

Next, you'll need a gold piece so either beat the wrestler in the square (use the little knife) or visit the enchanting young artist at her snow-covered house. Offer to be her agent and she'll give you 10 gold pieces. Take the cash and go to the second brother's house. Trample on the grass and you'll be escorted to the courthouse. In jail talk to the kids outside the window and they'll show you how to escape. Go back to the second brother's house and go in. Ask him for a pass and he'll just give it to you.

Mr Jeffrey's unusual moniker comes from an old Infogrames game of the same name. He'll be forever grateful if anyone has or knows the whereabouts of a PC version.

Adventure corner

If you have any suggestions for solutions or features that you would like to see in PC Review's tips section, drop us a line at the usual PC Review address. I'm sorry to say that with the increase in magazine size, time has become much more limited and QED is, for the time being, unable to continue offering the highly popular QED Guides service. From this issue the service is temporarily suspended while I sort out a better way of doing things. I apologise if your reply is or has been a little late because we have been literally snowed under with post since we started. Please don't send QED any more queries!

But if there are any questers out there who wouldn't mind replying to people themselves, the whole thing might not die a complete death. I'd like to keep the whole thing up and running, so if you've completed a game and don't mind helping out the odd lost soul then send in your name, address and the adventures you've solved for the QED database. I'll just pass the queries on to you. Might this work? Is there really a helpful brotherhood of adventurers out there? Perhaps you'd like us to put the odd solution onto the coverdisks? If you have any ideas why not drop a line to "The future of QED" and tell me what you think. Cheers.

WHAT THE 'EXPERTS'

THINK ABOUT

STRIKER

SNES FORCE

AUG 1993

'Striker is more than just the most comprehensive soccer sim to date, it's a dream come true'

SUPER ACTION

AUG 1993

'The best football game I've ever played . . . on any other format'

JULIAN RIGNALL

'A really brilliant sports simulation, football fans are going to go mad about it'

SUPER PLAY

AUG 1993

'It's absolutely brilliant. It's hard to imagine a more enjoyable footy game than Striker'

C.&V.G.

AUG 1993

'Enjoyable, competitive and totally brilliant in every conceivable way'

TOTAL

AUG 1993

'The best football game, in fact, the best sports game. It's brilliant fun and simple without being basic. An instant classic'

STRIKER



£29.99

NOW IT'S AVAILABLE FOR YOUR IBM PC & COMPATIBLE



RAGE SOFTWARE LTD. TRIDENT HOUSE, 105 DERBY ROAD,
LIVERPOOL L20 8LZ. TEL: 051-933 2688. FAX: 051-933 2462

Lyons Software

CD ROM TITLES

	Bundle	Retail		Bundle	Retail
7th Guest	£31.99	£49.99	Kings Quest V	£24.99	£35.99
Chess Master 3000	£26.99	£38.99	Sherlock I	£21.99	£32.99
Dune	£25.99	£38.99	Sherlock II	-	£39.99
Dinosaurs MPC	£28.99	£39.99	Sherlock III	-	£43.99
Space Shuttle	£25.99	£41.99	Monkey Island	£24.99	£37.99
Legend of Kyrandia	£23.99	£38.99	Loom	£24.99	£32.99
Jones in the Fast Lane	£23.99	£37.00	Ultima 1 - VI	-	£48.99
Wing Com/Ultima V	£29.99	£37.99	Jukebox	£20.99	-
Beauty and the Beast	-	£33.99	Railroad Tycoon	£24.99	£37.99
Day of the Tentacle	-	£39.99			

CD ROM DRIVERS & SOUND CARDS

Panasonic CR 562B (Internal)	£199.00
Soundblaster Pro Card	£103.00
Speakers	£20.00

SPECIAL OFFER
Buy all 3, Save £12.00
£310.00

Soundware 4000 Pro Kit - Best Buy! £460.00

Includes Panasonic CR 562 Drive Interface Card, Advanced Gravis Ultrasound 16 Bit Sound Card, Mains Speakers. Also included are five software titles, the 7th guest, chess master 3000, world atlas, US atlas and the mavis beacon typing tutor. Installation software drivers and manual.

SEND SAE FOR CATALOGUE OF HARDWARE AND SOFTWARE.

Lyons House, 2 Station Road, Frimley, Camberley, Surrey GU16 5HF.
Tel: (0276) 685761 Fax: (0276) 691090

No need to add VAT. Please note prices are subject to change. UK postage please add £7.00 per hardware item, £3.50 per software item. Please ring Mon - Fri 10.00am - 5.00pm only.
The above bundled software is only available with hardware.

WE GIVE YOU A * FREE * DISK WITH
YOUR 1ST ORDER AND A * FREE *
GAME WITH SOFTWARE ORDERS
OVER £40.00 * OUR CHOICE *

* Sierra Specials *

Space Quest 1	EGA	3.5"	19.95
Space Quest IV	EGA	3.5"	19.95
Leisure Suit Larry III	EGA	3.5"	19.95
Kings Quest IV	EGA	3.5"	19.95

* AMAZING BARGAINS AT £8.95 ONLY EACH! *

Winter Super Sports -	
Hunt for Red - October 1 -	
Bloodwych - Falcon - Pro Golf -	
Deluxe Strip Poker - Die Hard 2 -	
Tank Attack	Home Alone

* COMPILATIONS SUPER DEALS *

Ten Great Games	(5.25)	19.95
Power Pack	(3.5)	14.95
Fantasy Pack	(3.5)	9.95
Speed Pack	(3.5)	8.95
Sports Pack	(3.5)	8.95
Star Pack	(3.5)	8.95
Arcade I	(3.5)	5.95
Arcade II	(3.5)	5.95
Arcade Bonanza	(3.5)	5.95

BEST SELLER SPECIALS

Home Alone II	19.95
Rotox	17.95
Carnage	8.95
Contraptions	16.95
G. Souness Soccer Manager	8.95
Inca	30.95
Jurassic Park	25.95
Lotus Ultimate Challenge	24.95
Mario is Missing	25.95
Napoleonic	25.95
Nigel Mansell	25.95
Pinball Dreams	26.95
Sensible Soccer 92/93	24.95
Sim Life	25.95
The Greatest	28.95
Dragons Lair 3	29.95
A-Train	29.95
Dogfight	34.95

EXPERT SERIES : £12.99 EACH

Animator - Astronomer - Maps - Health & Nutrition -	
Landscape - Home Design - Office Design - Petcare -	
Publisher - Resume - Puzzles & Mazes.	

SEND £1 IN STAMPS FOR OUR 3.5" DISK

CATALOGUE £2 EXTRA PER 50 DISKS

£5 FOR COMPUTERS

WE ACCEPT ALL MAJOR CREDIT CARDS.

TAICOM 486 SX 25 MHZ

- * 130-MB HARD DISK !
- * SUPER VGA MONITOR !
- * MS DOS VERSION 6
- * 3.5" 1.44 Mb DRIVE!
- * 4Mb RAM
- * STANDARD PORTS
- * 12 MONTH ON SITE WARRANTY!

NOW AN AMAZING £899 INC VAT

OLIVE ACCOUNTS CONTROLLER

A COST EFFECTIVE SOLUTION TO YOUR BUSINESS NEEDS

FEATURES INCLUDE:

- * Nominal Ledgers
- * Purchase Ledger
- * Sales Control
- * Stock Control
- * Powerful Reporting
- * 2 Million Accounts

MRP = £179.95 INC

NOW ONLY = £89.95 VAT

** RIBBONS **

Star LC 10	Mono	3.35
Star LC 10	Col	5.50
Star LC 24/10	Mono	3.95
Citizen 1200	Mono	3.45

** ACCESSORIES **

12 Holder Slimpak	0.95
100 Holder Lockable	7.95
3.5" Disk Labels 40 for	0.95
3.5" Head Cleaning Kits	3.45
5.25" Head Cleaning Kits	3.45
6mm Antistatic Mousemat	3.95

* DISKS II/LABELS * BRANDED

	DSDD	DSHD	DSDD	DSHD
10 =	4.40	5.95	6.00	9.50
50 =	19.95	24.95	27.50	45.00
100 =	36.95	44.95	50.00	85.00
200 =	68.95	84.95	95.00	64.00

MODEM USERS CALL GAMES HQ ON:

PROTOCOL 0642 596597 24 HOURS

IF YOU CAN'T SEE WHAT YOU NEED, CALL US!
WE CAN NORMALLY SUPPLY ANY ITEM

*** GAMES H.Q. * BOX 17**
COULBY NEWHAM, MIDDLESBOROUGH
CLEVELAND, TS8 9YW

FAX: 0642 822 700

TEL: 0642 595 182

GRAVIS
ULTRASOUND
£145.99



MAIL ORDER EXPRESS



THRUSTMASTER
F.C.S
£75.99

10 COMMERCIAL ST. BATLEY WEST YORKSHIRE WF17 5HH

Call us on 0924 422057 or 0924 422226. MON-SAT 8.00am-8.00pm.

OR CALL INTO OUR SHOP WE'RE OPEN MON-SAT 9.00AM -6PM

JOYSTICKS & ACCESSORIES

CH MACH 1	19.99
CH MACH 1+	23.99
CH FLIGHTSTICK	36.99
CH VIRTUAL PILOT	76.99
GRAVIS ANALOG	34.99
GRAVIS ANALOG CLEAR	36.99
GRAVIS ANALOG PRO	39.99
KRAFT THUNDERSTICK	27.99
THRUSTMASTER F.C.S.	75.99
THRUSTMASTER F.C.S. PRO	110.99
THRUSTMASTER W.C.S. MK2	88.99
GRAVIS ELIMINATOR GAMES CARD	24.99
GRAVIS ULTRASOUND SOUND CARD	145.99
SOUNDBLASTER COMPATIBLE SOUND CARD	69.99
PC PACK (JOYSTICK, CARD & MOUSE)	29.99
SCREENBEAT SPEAKERS	19.99
ZY-FI STEREO SPEAKERS	38.99
MS-DOS 6.0 UPGRADE	55.99
AMIS 3 BUTTON MOUSE	19.99
MICROSOFT MOUSE LATEST VERSION	56.99
MOUSE MATS RED OR BLUE	02.50
MOUSE POCKETS	01.99
DISK DRIVE CLEANING KITS	01.99
100 DISK LABELS	01.99

CD-ROM TITLES

7TH GUEST	39.99
BEAUTY & THE BEAST STORYBOOK	29.99
CHESSMASTER 3000	29.99
DAY OF THE TENTACLE	29.99
DUNE CD-ROM	30.99
FATE OF ATLANTIS	30.99
KINGS QUEST 6	32.99
MONKEY ISLAND 1 ENHANCED	32.99
TORNADO CD-ROM	35.99
ULTIMA UNDERWORLDS 1+2	32.99
WING COMMANDER 1 DELUXE	31.99
WING COMMANDER 2 DELUXE	31.99

ALL GOODS DESPATCHED 1ST CLASS
RECORDED DELIVERY AS STANDARD. FREE
POSTAGE (UK ORDERS ONLY).
NEXT DAY COURIER SERVICE AVAILABLE.
PRICES MAY CHANGE WITHOUT PRIOR NOTICE.
PLEASE CALL FOR LATEST PRICING.

ACES OF THE PACIFIC

WW2 1946 ACES EXPANSION DISK	18.99
ALONE IN THE DARK	27.99
AMAZON	25.99
ANOTHER WORLD	21.99
ARCHER MACLEAN'S POOL	23.99
ASHES OF EMPIRE	26.99
A.T.A.C.	26.99
A.T.P.	27.99
AV-8B HARRIER ASSAULT	25.99
B17 FLYING FORTRESS	27.99
BATTLECHESS 4000	25.99
BETRAYAL AT KRONDOR	25.99
BITMAP BROTHERS COLLECTION	25.99
BODY BLOWS	19.99
BUZZ ALDRINS RACE INTO SPACE	30.99
CAMPAIGN	26.99
CARL LEWIS CHALLENGE	21.99
CHAMPIONSHIP MANAGER '93	22.99
CHESSMASTER 3000	24.99
CIVILISATION	25.99
COMANCHE MAXIMUM OVERKILL	29.99
COMANCHE MISSION DISK	15.99
COOL WORLD	18.99
CREEPERS	22.99
CURSE OF ENCHANTIA (TO CLEAR)	18.99
DAGGER OF AMON RA	25.99
DARKLANDS	27.99
DAVID LADBETTERS GOLF	27.99
DAUGHTER OF SERPENTS	25.99
DAY OF THE TENTACLE	27.99
DISCOVER SPACE	26.99
DOGFIGHT	27.99
DUNE 2	23.99
DYNABLASTERS	23.99
ESPANA GAMES '92	22.99
EMPIRE DELUXE	27.99
ETERNAM	23.99
EYE OF THE BEHOLDER 3	24.99
F117A NIGHTHAWK	17.99
F15 STRIKE EAGLE 3	27.99
FALCON 3.0	29.99
FALCON 3.0 MISSION DISK	18.99

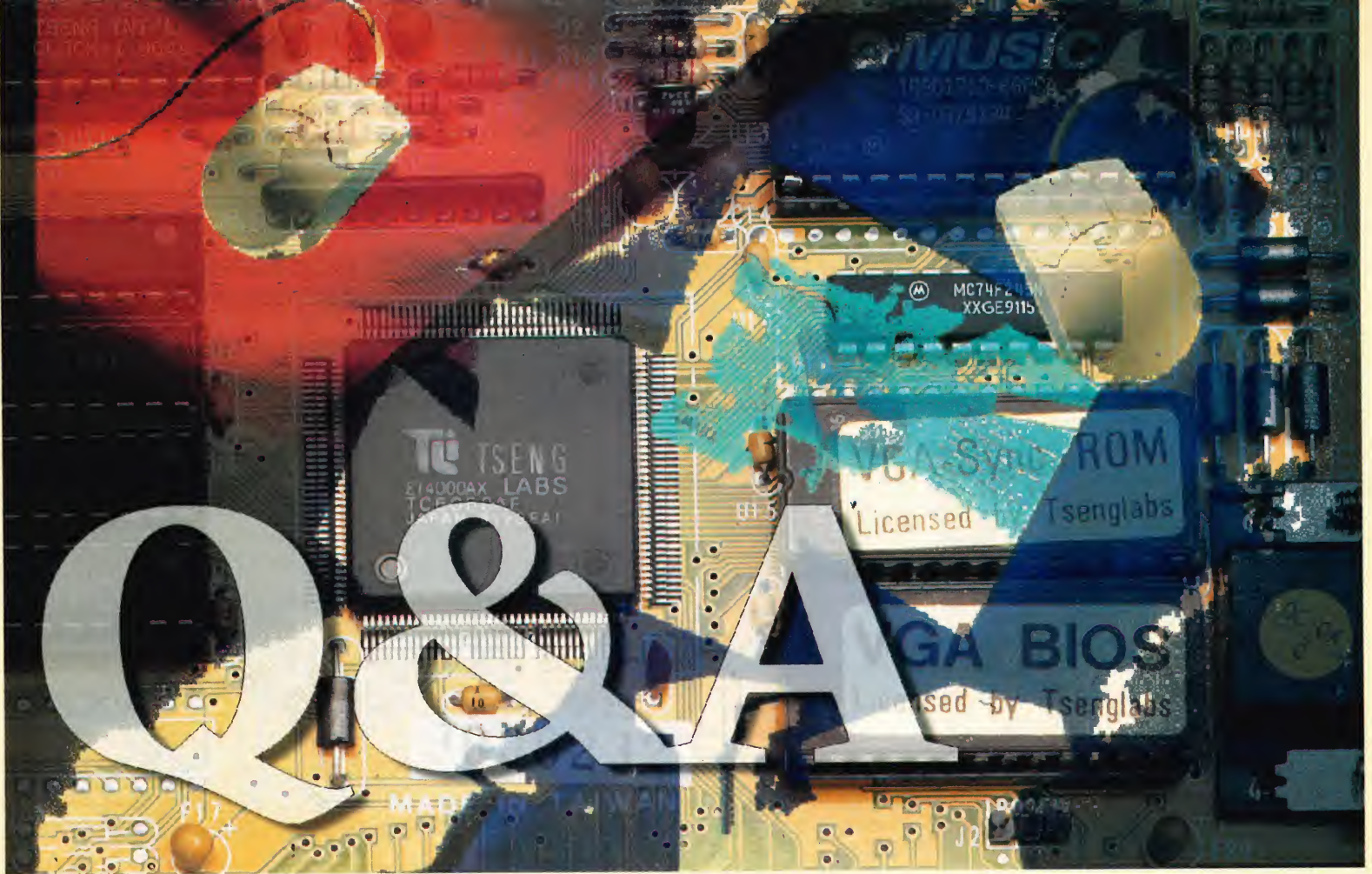


FASCINATION

FIELDS OF GLORY	27.99
FIRST SAMURAI	20.99
FLAMES OF FREEDOM	24.99
FLASHBACK	23.99
FORMULA 1 GRAND PRIX	27.99
FREDDY PHARKAS	25.99
FRONT PAGE FOOTBALL	25.99
GODS	21.99
GUNSHIP 2000	25.99
GUNSHIP 2000 MISSION DISK	18.99
HARRIER JUMP JET	26.99
HEAD TO HEAD F19 + MIG29	26.99
HISTORYLINE	25.99
HUMANS (TO CLEAR)	15.99
INCA (TO CLEAR)	26.99
INCREDIBLE MACHINE	25.99
INDY FATE OF ATLANTIS	23.99
ISHAR 2	22.99
JETFIGHTER 2	27.99
JIMMY WHITES SNOOKER	20.99
K.G.B. (TO CLEAR)	20.99
KINGS QUEST 6	27.99
LEGEND OF KYRANDIA	23.99
LEGEND OF VALOUR	22.99
LEISURE SUIT LARRY 5	25.99
LEMMINGS	16.99
LEMMINGS 2	25.99
LETHAL WEAPON	23.99
LINKS 386 PRO	29.99
LINKS COURSES	14.99
LINKS PRO COURSES	17.99
LOST FILES OF SHERLOCK HOLMES	26.99
LOTUS	19.99
LURE OF THE TEMPTRESS	22.99
MAELSTROM	Call
MAGIC POCKETS	21.99
MANTIS XF5700 (TO CLEAR)	26.99
MEGA-LO MANIA	22.99
MICROSOFT FS4 UPGRADES	Call
MONKEY ISLAND	21.99
MONKEY ISLAND 2	23.99
PATRIOT	27.99

PINBALL DREAMS

PINBALL FOR WINDOWS	23.99
POLICE QUEST 3	25.99
PRINCE OF PERSIA 2	25.99
PREMIER MANAGER	19.99
PUSHOVER	21.99
QUEST FOR GLORY 3	25.99
RAGNAROK	23.99
RAILROAD TYCOON DELUXE	27.99
REACH FOR THE SKIES	23.99
RETURN OF THE PHANTOM	27.99
REX NEBULAR	27.99
RINGWORLD	25.99
ROBOSPORT FOR WINDOWS	24.99
ROME AD 92	22.99
SENSIBLE SOCCER 92/93	21.99
SHADOW OF THE COMET	27.99
SPACE LEGENDS	24.99
SPACE QUEST 4	25.99
SPACE HULK	27.99
STAR TREK SCREEN SAVERS	32.99
STRIKE COMMANDER	30.99
SPEECH ACCESSORY PACK	13.99
STUNT ISLAND	29.99
SUPER TETRIS	23.99
SYNDICATE	27.99
THE LEGACY	27.99
THE SUMMONING	23.99
TORNADO	29.99
ULTIMA 6	18.99
ULTIMA 7	26.99
ULTIMA 7 PART 2	27.99
ULTIMA UNDERWORLDS 2	26.99
WEEN THE PROPHECY (TO CLEAR)	15.99
WING COMMANDER 1	18.99
WING COMMANDER 2	25.99
WING COMMANDER ACADEMY	24.99
SPECIAL OPERATIONS 1	15.99
SPECIAL OPERATIONS 2	15.99
SPEECH ACCESSORY PACK	13.99
XWING	29.99
XWING MISSION DISK	16.99
ZOO	19.99



Bemused, befuddled, or bewildered about your PC? If your hardware gives you headaches and you're stricken with software seize-ups, share your problem with Q&A's Mike James and he'll endeavour to help

Working Windows

Q I have an 8086 PC, with VGA 256 graphics, 640K RAM, 5.25" disk drive (360K) and a 21Mb hard disk and am wondering if there are any versions of Windows that will work on my machine. I have flicked through magazines and read all about the program and it sounds great, but all I find is Windows 3.1, which I know won't work on my PC.

Also, please could you recommend a games club that does 5.25" disks. At the moment, I am with Special Reserve, which up till now has been great, but it has just stopped doing the disks. Please help! I am also wondering if Timeworks for DOS will work on my machine. If not, please could you recommend another DTP program that will work.

**Andrew Hollingworth
Norfolk**

A Windows 3.0 used to work with a 8086, but only in real mode. If you can get hold of an old copy then it should work, but you need to be

warned about a number of things. The first is that not all of the video drivers will work on an 8086 because some of them use 286/386 specific instructions.

The second is that in real mode Windows isn't really worth having. It's another of those 'you can do it but it isn't worth the trouble' situations. If you want Windows to multi-task, ie, run more than one program at a time, then I would recommend Quarterdeck's Desqview – but you will also need plenty of expanded memory.

Timeworks for DOS should work OK on your machine – after all it was originally developed specifically for 8086 machines. There is a good range of DTP packages that work on 8086 machine including the top of the range Ventura for DOS, but don't expect too much.

They are all a bit on the slow side when it comes to graphics and you will require plenty of disk space if you need printer and screen fonts. The situation can best be described as workable but not pleasant!

As to games clubs and 5.25" disks,

not being a member of any, I can't comment – this query is best thrown open to other readers. Any recommendations?

We didn't do it – honest!

Q Until recently, I had a perfect 325Mb hard disk, with absolutely no bad sectors whatsoever.

I installed the demo of Prince of Persia 2 from your cover disks on PC Review Issue 21, and tried to play it. After the short opening animation and music, I was informed that the program could not find the file "Nis.dat".

After a quick look, I decided that I could not find it either! The next time I ran it, I received the far more serious message "Data error reading drive C", so I left Norton Disk Doctor searching for any problems with the disk and lo and behold five bad sectors have appeared.

I don't like to blame Prince of Persia 2, but all the sectors have appeared in Prince.exe and .dat files in the

Prince of Persia 2 directory and the message did appear when loading Prince of Persia 2.

I would like to know of any way of reviving the bad areas on the disk, not for the space, it's only 5 x 8K = 40K, but because they will get in my way, during file defragmenting, for example, and may slow down disk operations.

Would formatting the whole disk using DOS format fix them, and if not, will a low level format with something like Fdisk? I don't really want to format it at all as I have masses of stuff (300Mb, mostly large artwork) so if there is any other way, do tell.

**Keith Groves
East Sussex**

A There is no way that a piece of software can cause a bad sector to appear on a disk drive. The reason is that a bad sector is the result of a change in the sector format that ordinary applications software doesn't get a chance to play with. Indeed, the only software that

does modify this area of each sector is a low level format program.

What happens is that the low level format program writes a pattern of track and sector codes to the hard disk that are used from then on to identify each sector.

Application programs simply write to the data portion of each sector. If there is an error in the data portion, you get a data error and in the case of an error anywhere else, you get a sector error of some kind. Applications programs can cause data errors, but sector errors are most often caused by physical damage to the hard disk.

What is most likely to have happened is that the area of the disk used to store Prince of Persia was starting to deteriorate, but this went undetected because it wasn't being used. When you installed the game the unreliability of the sectors became all too apparent!

Although you might well manage to get rid of the bad sectors by reformatting the disk, if there is anything physically wrong with them they will simply go bad again in a short space of time.

My advice is to live with them – they will not make any great difference to defragmentation, or anything else for that matter.

What is more worrying is the possibility that your hard disk may be developing a progressive fault. To monitor the situation, you should keep running Norton and look out for additional bad sectors.

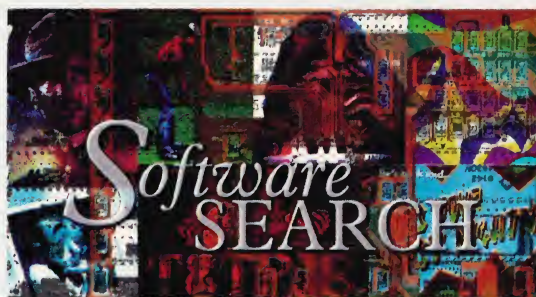
An exceptional error

Q I have a 386SX 33MHz with 4Mb of RAM. Since I added the last 2Mb, I have been having a problem in that the machine keeps crashing. Having been switched on for a short while, the PC either hangs up or performs a hard reset. Then it counts the memory to a random amount rather than the full 4096.

The only way that I can get round this is by switching it off for a while, which suggests that something is getting too hot.

The question is, what?

The only clue I can find to the solution is when I play Railroad Tycoon. With this game, rather than restarting the machine, it comes up with the message, "EMM386 excep-



Menu master

Q I have a 386 PC with hard disk, VGA graphics, DOS 4 and Windows version 3. My PC was supplied with DOS 4 and an easy to use system menu, and I have since upgraded to DOS 6 and now have to run from DOS Prompt or Shell. Is it possible, therefore, to get any software that will start me at the same type of menu system as before or similar?

**Mr K Luke
Scotland**

A There are so many menuing systems you are spoilt for choice. The problem is that no matter which one you do choose, you will have to spend time learning how to set it up. Many users find that this takes as much time as it saves! HMD IV (disk UM10 Shareware Marketing) is supposed to be easy to use and it has lots of facilities.

Another possibility is Easy Access (disk 2723 from PDSL). Personally, I think that the facilities in MS-DOS 5/6 are good enough to create menus without help. Look up batch files and the use of DOSkey.

I also think that customising the DOSShell program is a good way of building making DOS easier to use. Before going to the trouble of learning a menuing system's way of doing things, have a much closer look at what you already have in DOS 6.

Photo call

Q My hobby, as well as having fun with my PC, is photography. I don't want a database to index my photographs – that's an easy question. What I want are any general utilities extra that might be available concerning photography – depth of field calculators, etc.

Also, are there any tutorial programs on photography? I remember that there used to be one available for the Commodore PET but that was years ago.

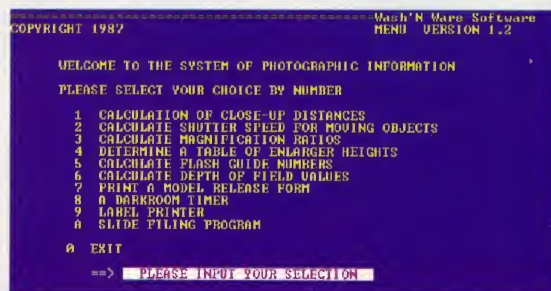
**Keith Simpson
Newcastle**

A The Commodore PET is a long time ago, but I think the software you remember was from Kodak. However, I could be wrong. The important point is that the Kodak PC Photographer sounds exactly like the sort of program you are interested in. It costs £39 (available from Shareware Marketing, disk KOD300 (0297) 24088 – although it isn't shareware!) and should work on

almost any machine. It includes a camera simulator, photo album, on-line reference guide and technical database.

Another possibility is PhotoPack – which this time is shareware – disk 1439 from PDSL. This contains a range of useful calculators including depth of field, enlarger adjustments, but, to be honest, the only really useful program in the collection is the darkroom timer. This is a simulation of a multi-step process timer complete with different beeps for each stage. You can set up timings for processes and save and recall them by name.

I have seen a photographic tutorial program about concepts such as exposure and depth of field, but I cannot locate it – can any reader help?



Football management

Q What I am looking for is a really good football management game. A game that I can really control, so that decisions on team selection, tactics, etc, do actually affect play and the results and are not just number juggling or cosmetic as I have found to be the case with all the games I have tried to date.

Ideally, I want the game to be based on the English League, with a full fixture list of League and Cup matches. If possible, I should like a good graphic presentation similar to the recent Dynamix Front Page Sports Football appears to offer, though I realise this is American football.

I understand that I may be asking for the earth, so I will be pleased if you can suggest a game that offers just some of the features I want.

**Ron Weir
Suffolk**

A Have you tried Championship Manager 93 from Domark? It seems to be everything you dream of!

More Maths help

Q In reply to the letter from F Hewitt, Norwich regarding GCSE Maths revision, I obtained a piece of shareware from Testware UK Limited (46, The Avenue, Harrogate, North Yorkshire HG1 4QD) called Maths Utils for GCSE. It is very easy to use, accurate and very cheap to register. I can recommend it.

**John Bright
Suffolk**



ONLY THE BEST

COMPUTER SOFTWARE

7 CLEEVE WOOD RD, DOWNEND,
BRISTOL, BS16 2SF
TEL: 0272 401315/401316



**LOOK!
NO VAT
TO ADD
NO CREDIT
CARD
SURCHARGE**

**THE BEST
VALUE
AND THE
BEST
SERVICE**

OTB CODE OF PRACTICE
1. CREDIT CARDS ARE
NOT CHARGED UNTIL
GOODS ARE DESPATCHED.
2. THE CUSTOMER IS
ALWAYS INFORMED
WHETHER GOODS
ARE IN STOCK OR NOT

MON-FRI 10am - 7pm, SAT 10am - 5pm SUN TIMES VARY. ANSWERPHONE AT ALL OTHER TIMES.

All prices include V.A.T. UK postage add £1.00 per item Prices subject to change. Access and Visa accepted. Allow 7 days for cheques.

CALLERS BY APPOINTMENT ONLY

1869	£21.99
AMBUSH AT SORINOR	£24.99
ACES OF THE PACIFIC + MISSIONS	£26.99
ACES OVER EUROPE	£26.99
AIR BUCKS V1.2	£21.99
AIR COMBAT CLASSICS	£28.99
ALCATRAZ	£19.99
ALIEN BREED	£18.99
ALONE IN THE DARK	£26.99
ALONE IN THE DARK 2	£26.99
ANIMATION CLASSICS	£28.99
ARCADE CLASSICS MICROSOFT	£14.99
ARCHER MACLEAN POOL	£24.99
ARMOUR GEDDON	£25.99
ATP	£25.99
A TRAIN	£24.99
A TRAIN CONSTRUCTION KIT	£15.99
AV8B HARRIER ASSAULT	£24.99
B17 FLYING FORTRESS	£26.99
BATTLE CHESS 4000	£22.99
BATTLE ISLE 93	£16.99
BETRAYAL AT KRONDOR	£26.99
BLADE OF DESTINY	£24.99
BLUE AND THE GREY	£24.99
BLUE FORCE	£25.99
BODY BLOWS	£18.99
BURNS RUBBER	£19.99
CAR & DRIVER	£24.99
CARRIERS AT WAR	£22.99
CARRIERS AT WAR CONST KIT	£25.99
CHAMPIONSHIP MANAGER'93	£18.99
CHESS MANIAC 5 MIL +1	£27.99
CHESS MASTER 3000	£23.99
CHESSMASTER 4000 TURBO	£24.99
CIVILIZATION	£24.99
CLASH OF STEEL	£22.99
COMMACHE	£27.99
CRUSADERS OF THE DARK SAVANT	£29.99
CURSE OF ENCHANTIA	£22.49
CYBER RACE	CALL
DAY OF THE TENTACLE	£26.49
DOGFIGHT	£26.99
DRACULA	£24.99
DUNE 2	£22.99
EUROPEAN CHAMPIONS	£19.99
EYE OF THE BEHOLDER III	£24.99
F15 STRIKE EAGLE III	£26.99
FALCON 3.0	£26.99
FALCON 3.0 MIG29 ADD ON	£16.99
FALCON3 MISSION DISK	£16.99
FIELDS OF GLORY	£26.99
FLASHBACK	£24.49
FLIGHT SIMULATOR 5	£29.99
FORMULA 1 GRAND PRIX	£26.99
FREDDY PHARKUS	£24.99
FRONTIER ELITE II	£24.99
FRONT PAGE SPORTS FOOTBALL PRO	£24.99
GABRIEL KNIGHT	£24.99
GATEWAY 2	£24.99
GLOBAL DOMINATION	£22.99
GOAL KICK OFF 3	£22.99
GREAT NAVAL BATTLES	£24.99
G.N. BATTLES MISS DISK	£12.99
GUNSHIP 2000	£24.99
HARRIER JUMP JET	£26.99
HIGH COMMAND	£26.99
HIRED GUNS	£26.99
HISTORY LINE	£24.99
INCREDIBLE MACHINE	£24.99
EVEN MORE INCREDIBLE MACHINES	£24.99
INNOCENT UNTIL CAUGHT	£24.99
INDY JONES, FATE ALTANTIS	£23.99
ISHAR 2	£20.99
JACK THE RIPPER	£26.99
JAMES POND 2	£19.99
JORDAN IN FLIGHT	£24.99
JURASSIC PARK	£22.99
K.G.B.	£23.99
KINGS QUEST VI	£26.99
LANDS OF LORE	£22.99
LEGACY	£26.99
LEGENDS OF VALOUR	£24.99
LEMMINGS DOUBLE PACK	£24.99
LEMMINGS 2 THE TRIBES	£24.99
XMAS LEMMINGS	£12.99
LEISURE SUIT LARRY VI	£26.99
LINKS 386 PRO	£28.99
LINKS COURSES:	£13.99
LINKS 386 SVGA COURSES: BANFF SPRINGS, INNISBROOK,	
MAUNA KEY, THE BELFRY	EACH £15.99
LITIL DEVIL	£24.99
LOST IN TIME	£26.99
LOST VIKINGS	£21.99
LOTUS ULTIMATE CHALLENGE	£21.99
MÆLSTROM	£24.99
MAN UNITED LEAGUE CHAMPIONS	£18.99
MERCENARIES	£25.99
M+MAGIC IV CLOUDS XEEN	£32.49
M+M V DARKSIDE XEEN	£32.49
MICROSOFT GOLF (WINDOWS)	£30.99
MONKEY ISLAND II	£22.99
MONOPOLY	£21.99

NHL ICE HOCKEY	£26.99
NICK FALDO GOLF	£24.99
OMAR SHARIF'S BRIDGE	£25.99
PACIFIC WAR	£25.99
PATRIOT	£29.99
PINBALL DREAMS	£22.99
PIRATES GOLD	£26.99
POLICE QUEST 4	£24.99
POOL PC	£22.99
POPULOUS 2	£25.99
PREMIER MANAGER 2	£21.99
PRINCE OF PERSIA 2	£24.99
PRIVATEER	£29.99
PRIVATEER SAP	£13.99
PROTOSTAR	£24.99
QUEST FOR GLORY 4	£24.99
RAGS TO RICHES	£24.99
RAILROAD TYCOON DELUXE	£24.99
RALLY	£24.99
REACH FOR THE SKIES	£22.99
RED BARON + MISS BLDR	£26.99
RETURN OF THE PHANTOM	£26.99
RETURN TO ZORK	£29.99
RINGWORLD	£25.99
ROME AD92	£22.99
RULES OF ENGAGEMENT	CALL
RYDER CUP	£19.99
SABRE TEAM	£18.99
SAM & MAX	CALL
SCRABBLE	£20.49
SEAL TEAM	£26.99
SENSIBLE SOCCER	£20.99
SECRET WEAPONS LUFTWAFFE	£26.99
SEVEN CITIES OF GOLD	£24.99
SHADOW OF COMET	£26.99
SHERLOCK HOLMES THE LOST FILES	£24.99
SHADOWCASTER	£26.99
SHADOWWORLDS	£22.99
SIEGE	£18.99
SILVER SEED	£15.99
SIM CITY 2000	CALL
SIM CITY DE LUXE	£22.99
SIM FARM	£21.99
SIMLIFE	£21.99
SIMON THE SORCEROR	£24.99
SOCCER KID	£18.99
SPACE CRUSADE	£19.99
SPACE HULK	£26.99
SPACE LEGENDS	£21.99
SPACE QUEST 5	£26.99
SPEAR OF DESTINY	£24.99
SPEED RACER	£24.99
STAR CONTROL 2	£24.99
STAR LEGIONS	£17.99
STARLORDS	£27.99
STONEKEEP	CALL
STREETFIGHTER 2	£18.99
STRIKE COMMANDER	£29.99
STRIKE COMMANDER SAP	£12.99
STRIKE COMMANDER TACTICAL OPS	£13.99
STRONGHOLD	£22.99
STUNT ISLAND	£28.99
SUB WAR 2050	£27.99
SUPER LEAGUE MANAGER	£19.99
SYNDICATE	£26.99
TASK FORCE 1942	£27.99
TAKE A BREAK PINBALL	£21.99
T.F.X.	£27.99
TIM TOONS	£24.99
TORNADO	£27.99
TORNADO OF DESERT STORM	£16.99
ULTIMA 7	£24.99
ULTIMA 7 PART II SERPENTS ISLE	£27.99
ULTIMA UNDERWORLD	£24.99
UNDERWORLD 2	£24.99
UNLIMITED ADVENTURE	£22.99
V FOR VICTORY 1 OR 2	£23.49
V FOR VICTORY 3	£27.99
V FOR VICTORY 4	£27.99
VEIL OF DARKNESS	£22.99
VALHALLA	£22.99
VICTORY AT SEA	£26.99
WAR IN RUSSIA G. RIGSBY	£27.99
WAR IN THE GULF	£21.99
WARLORDS 2	£26.99
WHEN TWO WORLDS WAR	£24.99
WING COMMANDER 2	£24.99
WING COMMANDER ACADEMY	£21.99
WORLDS OF LEGEND	£16.99
XANTH	£24.99
XENOBOTS	£24.99
X-WING	£27.99
X WING MISSION DISK	£13.99
YSERBIUS	£24.99
ZOOL	£21.99

EDUCATIONAL SOFTWARE

MARIO'S PLAYSCHOOL	£22.99
MARIO TEACHES SUMS	£22.99
NODDY'S PLAYTIME	£19.99
NODDY'S BIG ADVENTURE	£19.99

FATTY BEARS BIRTHDAY SURPRISE	£22.99
FUN SCHOOL TITLES	£16.99

DISNEY SOFTWARE - EDUCATIONAL

MICKEYS ABC	£15.99
MICKEYS 123	£15.99
MICKEYS COLOURS SHAPES	£15.99
MICKEYS JIGSAW PUZZLES	£15.99
BEAUTY & THE BEAST	£19.99

SIERRA EDUCATIONAL

MIXED UP FAIRY TALES	£22.99
MIXED UP MOTHER GOOSE	£22.99

CD ROM TITLES

7TH GUEST LTD EDITION	£48.99
ADVANTAGE TENNIS	£24.99
ALONE IN THE DARK	£26.99
BLUE FORCE	£28.99
CHESSMASTER 3000 PRO	£35.99
CINEMANIA	£37.99
CYBER RACE	CALL
DAY OF THE TENTACLE	£29.99
DINOSAUR ADVENTURE	£36.99
DINOSAURS MICROSOFT	£40.99
DRACULA	£31.99
DUNE	£34.99
ERIC THE UNREADY	£21.99
EYE OF THE BEHOLDER 3	£25.99
GOBLINS 1&2	CALL
GREAT NAVAL BATTLES	£28.99
GUINNESS DISK OF RECORDS '93	£32.99
HISTORYLINE 1914-18	£24.99
INCA	£32.99
INDIANA JONES	£29.99
KINGS QUEST V1	£30.99
LANDS OF LORE	£27.99
LAURA BOW 2	£27.99
LEGEND OF KYRANDIA	£27.99
LEISURE SUIT LARRY 6	£27.99
LOOM	£29.99
MAD DOG McCREE	£28.99
MAN ENOUGH	CALL
MAVIS BEACON TYPING V2	£28.99
MICROCOSM	£32.99
MICROSOFT GOLF	£31.99
MONKEY ISLAND	£28.99
PROTOSTAR	£25.99
REBEL ASSAULT	CALL
REBEL ASSAULT	CALL
RETURN TO ZORK	£30.99
RING WORLD	£26.99
RYDER CUP	£22.99
SECRET WEAPONS OF THE LUFTWAFFE	£30.99
SHADOW OF THE COMET	£26.99
SHERLOCK HOLMES CONSULTING	
DETECTIVE 1, 2 OR 3	£39.99
SHUTTLE	£34.99
SPELLCASTING TRIPLE PACK	CALL
STONEKEEP	CALL
SUPER STRIKE COMMANDER	£38.99
T.F.X.	£30.99
ULTIMA SERIES 1-6	£37.99
UNDERWORLD 1+2	£30.99
UNLEASHED	£31.99
WING COMMANDER 2 DELUXE	£32.99
WING COM 2/UNDERWORLD	£32.99

CD ROMS

SPECIAL OFFERS

MITSUMI LU005 INTERNAL CD-ROM DRIVE WITH
INTERFACE, MULTI SESSION AND PHOTO CD COMPATIBLE
£151.58 (£129.00 + VAT)

PANASONIC 562 DOUBLE SPEED MULTI SESSION
CD-ROM DRIVE 32ms ACCESS TIME
AND 300 kb/s DATA TRANSFER.

INTERNAL £217.38 (£185.00 + VAT)
EXTERNAL £293.75 (£250 + VAT)

WITH INTERFACE CARD £41.13 (£35.00 + VAT)

DOS 6 UPGRADE £52.00

SOUNDCARDS

SOUNDBLASTER V2 WITH TWIN SPEAKERS
£82.99 (£70.63 + VAT)

SOUNDBLASTER PRO WITH TWIN SPEAKERS
£122.20 (£104.00 + VAT)

SOUNDBLASTER PRO 16 ASP (ADVANCED SIGNAL
PROCESSOR CHIP)
£211.50 (£180.00 + VAT)

POSTAGE ON SPECIAL OFFERS:
CD-ROMS - £10, SOUNDCARDS £7

tion error #16 – press Enter to boot”. I then press Enter and the same thing happens. Have you any idea what is happening?

Jake Barayev
London

A *You are correct in assuming that something is getting hot – my best guess is that it is one of the memory devices that you fitted.*

When you first switch your personal computer on, the memory works fine because the devices are cold. As they warm up, they become increasingly speed critical – the colder a piece of electronics is the faster it can operate reliably.

Eventually one of the memory devices reaches a sufficiently high temperature for it to be unable to keep up and the machine crashes. The reason you then get a random memory count is that the machine counts up the amount of memory that is working – so this might give you a clue as to which memory device it is. The EMM386 exception error is just a fancy way of saying that a memory fault has occurred in memory above the first megabyte.

If this behaviour has occurred since you upgraded, it is possible that you have fitted memory devices that are too slow. Check their speed rating against the devices fitted as the first two megabytes. If they are too slow then there isn't much you can do about it except change them.

One possible alternative is to use the BIOS set-up to increase the number of wait states, but this would slow your machine down a little. I can't tell you exactly how to do this because it varies according to the BIOS, and sometimes you can't do it at all!

Three little questions

Q 1) My Sound Blaster card does not recognise any of the joysticks that I have bought. It means using keys or the mouse for games like X-Wing and Zool which were already installed as part of the deal on the PC. When I attempt to calibrate a joystick I get the message, “Push joystick to top left and press fire”. I have tried everything, holding centre adjust, and so on, but it doesn't even recognise the fire button.

2) My base memory is very low (563K) which means I can't run a lot of games. I run DOS 6 with DoubleSpace, I know this takes memory but I am told it doesn't take this much. I am fairly new to the PC after an Amiga and don't want to muck about with it. My friend tried and seemed to make it worse.

3) I own a Packard Bell 386SX, Elite 1000 model, but I would now like a 486. When I enquired about a motherboard, I was told I couldn't fit one as it was too big. Does this mean I am stuck with this and have to buy one brand new?

J Fitzpatrick
Glasgow

A *In the same order:*
1) *The only two reasons that your Sound Blaster joystick port might not be working is that there is another joystick port already fitted or the port is disabled. Have a look for another joystick socket and if you can find one, try that instead. It still might not work, however, because you can only have one joystick port fitted at any one time.*

The solution is to disable the Sound Blaster joystick port by removing the little jumper plug – it's at the end of the board away from the joystick connector. The only other possibility is that the joystick port has already been incorrectly disabled by having the jumper removed. If neither possibility proves correct then the Sound Blaster card is broken.

2) *Yes, DoubleSpace does take a lot of RAM – about 40K unless you move it into upper memory. The best and simplest way of doing this is to run MemMaker which should automatically optimise your system and increase the amount of free conventional memory.*

3) *As I don't know the machine in question, it could well be too small to fit a standard replacement motherboard. You could shop around to find a smaller motherboard – they do exist. You need to measure the current motherboard and quote it to everyone you ask.*

A slightly different solution would be to buy a motherboard and new case – after all, a new case would only add around £50 to the bill! The case may look as if it is the bulk of your machine but in financial terms it isn't!

Q&A update

The back-up problem

Do you trust your hard disk? Well, you shouldn't. Hard disks are mechanical devices and for most of their life they work hard ... and then wear out. Even if a hard disk doesn't suffer one of those random failures everything is subject to, it will eventually stop working from old age. So why trust your megabytes of valuable data to a time bomb? The answer is probably that to do anything else is either too expensive or too time consuming. However, there are one or two new ideas and it is certainly worth re-examining the options.

The traditional choice for backing up a hard disk is to use a tape drive. As long as you choose the right model, this will make a copy of everything on your hard disk on to a single cassette of tape. It can take as long as an hour or more to make the tape copy, but you don't have to sit around while it happens. A tape drive is a good solution but most users object to the cost — £200 or more — and the fact that the tape drive cannot be used for anything but backing up the hard disk.

Until recently, the only alternative way of backing up a hard disk without a tape drive was to use floppy disks. This isn't a bad way in theory, but in practice it's doomed because of the number of floppy disks needed. If you have a 100Mb hard disk then you need roughly 70 floppy disks to back up the entire contents. You might be able to afford to buy seven boxes of diskettes, but how long could you stand the tedium of feeding them into the disk drive? Most users give up any attempt at backing up on to floppy disks out of boredom!

There are some techniques that you can use to reduce the number of disks needed. The most obvious is to be selective about what you copy. The simplest approach is to copy only data, not programs. After all, you should have the original disks to serve as a back-up. Taking this argument a step further, there is no point in backing up data files that haven't changed since the last time you backed up. This idea results in a procedure called an incremental back-up. You can perform an incremental back-up manually, but it's much easier to use a back-up program. A suitable one is included with MS-DOS 6 or you can buy one of the many that are available. The really difficult part of an incremental back-up is when you have to do the restore after a disk crash. You have to make sure that you copy from the floppy disks in the right order.

The other main way of reducing the number of disks needed for a back-up is to use compression. At best, this only cuts the number of disks needed in half, but it still helps. You can do it the hard way using a compression program like Pkzip or by using a back-up program that supports compression. The final vote in favour of using a special back-up program is that they can often increase the speed of writing to a floppy disk. The one in MS-DOS 6 supports all of these features.

Even when you put all of the advantages together of a floppy disk back-up program — it still isn't much fun. Now we come to the alternatives. The very latest idea is to use a floptical disk. A floptical drive looks like a standard floppy, but it can store 20Mb or so. This reduces the number of diskettes to back up a 100Mb hard disk to around five — or three if you use compression. A floptical drive costs around about the same as a tape drive and has the advantage that you can use it as an extra disk drive as well. If you can manage a higher price tag then a 3.5" 128Mb Magneto Optical (MO) drive at around £600 will back up a 100Mb hard disk on one diskette and works at speeds that make it almost as good as a second hard disk. But, as I said at the beginning, a more convenient solution to the problem remains to be found.

Mike James



NORTH
0506 441144
SOUTH
081 893 3630



Cheques payable to PC Action

NORTH
SOUTH

UNIT 1, TURNBULL WAY, KNIGHTSRIDGE EAST, LIVINGSTON, WEST LOTHIAN, EH54 9RB

27 HOUNSLOW ROAD, WHITTON, TWICKENHAM, MIDDLESEX, TW2 7BZ

SOUNDBLASTER DELUXE

LEMMINGS
INDIANAPOLIS 500
£50.28 £64.95 INC. VAT & DEL.

SOUNDBLASTER 16 BASIC

BASIC EDITION
16 BIT SOUNDBLASTER CARD FOR UNDER £135.00
£109.85 £134.95 INC. VAT & DEL.

MIDIBLASTER

MIDI SOUNDS MODULE
MIDI 1/1 LEAD
CAKEWALK APPRENTICE
£143.89 £174.95 INC. VAT & DEL.

SOUNDBLASTER PRO DELUXE

LEMMINGS, INDY 500
ENCYCLOPEDIA CD
£84.32 £104.95 INC. VAT & DEL.

SOUNDBLASTER 16 AdSP

16 WITH ADVANCED SIGNAL PROCESSOR
ENCYCLOPEDIA CD, MIC., VOICE ASSIST-
SPEECH RECOGNITION SOFTWARE
£165.17 £199.95 INC. VAT & DEL.

WAVEBLASTER

MIDI DAUGHTERBOARD
FOR SOUNDBLASTER 16 / AdSP
CAKEWALK APPRENTICE & MIDI1/1
£143.89 £174.95 INC. VAT & DEL.

SOUNDBLASTER PRO PLUS

PRO DELUXE EDITION, RECORDING
SESSION, MIDI 1/1 LEAD, MIC.
£118.36 £144.95 INC. VAT & DEL.

SOUNDBLASTER 16 SCSI-2

SOUNDBLASTER 16 WITH
AN INDUSTRY STANDARD
SCSI-2 INTERFACE
£165.17 £199.95 INC. VAT & DEL.

VIDEOBLASTER

MS VIDEO FOR WINDOWS
MACROMIND ACTION
TEMPRA, MMPLAY
£250.28 £299.95 INC. VAT & DEL.

SOUNDBLASTER PRO MCV

SOUNDBLASTER PRO FOR
MICRO CHANNEL PC'S (PS/2)
£148.15 £179.95 INC. VAT & DEL.

SOUNDBLASTER 16 MCD

SOUNDBLASTER 16
WITH SONY, MITSUMI &
PANASONIC INTERFACES
£148.15 £179.95 INC. VAT & DEL.

TV CODER

VGA-TO-VIDEO DECODER
OUTPUT FROM YOUR PC
TO A TV OR VIDEO
£131.13 £159.95 INC. VAT & DEL.

CD16 PACKS

SOUNDBLASTER 16, PANASONIC 563
CD-ROM DRIVE, PRO DIGITAL MAINS
SHIELDED SPEAKERS, MICROPHONE
M.MEDIA MUSIC EXPLORER,
TOOLWORKS MPC ENCYCLOPEDIA,
PHOTO CD ACCESS SOFTWARE
ADVANCED SIGNAL PROCESSOR CHIP
PLEASE ADD £50 TO INCLUSIVE PRICE

DISCOVERY INCLUDES ALL ABOVE & LOOM, THE ANIMALS, S.W.O.T.L. & MONKEY ISLAND ALL ON CD
PROFESSIONAL INCLUDES ALL ABOVE & TEMPRA, MACROMIND ACTION & AUTHORWARE STAR ALL ON CD

INT. **£420.49** £499.95 INC. VAT & DEL.
EXT. **£463.04** £549.95 INC. VAT & DEL.

STARTER PACK

Soundblaster Deluxe Edition
Powerbeat Speakers
Analogue Joystick

£71.55 £89.95 INC. VAT & DEL.

SPACE PACK

Soundblaster Deluxe
Powerbeat Speakers
CH Flightstick
Privateer

Privateer Speech Pack
£135.38 £164.95 INC. VAT & DEL.

FLIGHTSTICK

£27.60 £35.95 INC. VAT & DEL.

FLIGHTSTICK PRO

£54.53 £69.95 INC. VAT & DEL.

PANASONIC 563

MULTISESSION, DOUBLE SPEED, TRAY
LOADING, EIAJ DIGITAL AUDIO OUT
EXCEEDS MPC2 SPECIFICATIONS
CONNECTS TO SB PRO OR SB16
WITH INTERFACE KIT £30.00 EXTRA

INT. **£203.47** £244.95 INC. VAT & DEL.
EXT. **£241.77** £289.95 INC. VAT & DEL.

PRO STARTER

Soundblaster Pro Deluxe
J307 Mains Speakers
Analogue Joystick

£122.62 £149.95 INC. VAT & DEL.

16 STARTER

Soundblaster 16 Basic
Pro Digital Mains
Shielded Speakers
Analogue Joystick

£148.15 £179.95 INC. VAT & DEL.

SPEAKERS

POWERBEAT

£13.98 £19.95 INC. VAT & DEL.

PRO DIGITAL

MAINS SHIELDED

£33.26 £44.95 INC. VAT & DEL.

J307 MAINS

£29.00 £39.95 INC. VAT & DEL.

All games prices INCLUDE V.A.T. and Delivery
The price you see is the price you pay !!!

FLIGHT SIMS. ADVENTURE

Strike Commander	£34.95	Return To Zork	£35.95
Strike Com. Spch.	£17.95	Freddy Pharkas	£28.95
Strike Com. Tact. Ops.1	£17.95	Return of the Phantom	£29.95
F15 Strike Eagle III	£29.95	Space Quest V	£28.95
Harrier Jump Jet	£59.95	Alone In The Dark	£29.95
Stunt Island	£39.95	Lure Of The Tempstress	£19.95
Dogfight	£29.95	Rex Nebular	£29.95
Aces Of The Pacific	£28.95	Kings Quest 6	£34.95
WWII-1946 Add-On	£17.95	Ringworld	£28.95
Falcon 3.0 Fighting Tigers	£17.95	Simon The Sorcerer	£29.95
MiG 29	£17.95	Carmen Sandiego-Space	£29.95
Comanche	£29.95	Dune 2	£24.95
Comanche Mission Disk	£17.95		
A.T.P	£28.95		
ATAC	£29.95		
B17 Flying Fortress	£29.95		
Gunship 2000	£29.95		
Flight Simulator 4	£29.95		
Flight Simulator 5	£34.95		

SIMULATIONS

Sim Life	£28.95
Sim Farm	£28.95
Task Force 1942	£32.95
Jordan In Flight	£28.95
Links 386 Pro	£33.95
Links 386 Courses	£17.95
NHL Hockey	£34.95
Pinball Dreams	£29.95
Pinball for Windows	£24.95
Sensible Soccer	£24.95
X-Wing	£29.95
X-Wing Imperial Pursuit	£17.95
Privateer	£34.95
Privateer Speech Pack	£17.95
Sargon V	£22.95

R.P.G.'S

Eye Of The Beholder III	£27.95
Inca	£29.95
Yserbius	£29.95
Betrayal at Krondor	£32.95
Ultima Underworld 2	£29.95
Wizadry 7	£29.95
Space Hulk	£29.95

ARCADE & STRATEGY

Lemmings 2	£24.95
Civilisation	£28.95
The Incredible Machine	£29.95
Syndicate	£32.95
Gobliins	£21.95
Gobliins 2	£21.95
Seal Team	£34.95
Flashback	£27.95
Microsoft Arcade	£24.95

CD-ROM

Dracula Unleashed	£39.95
Legend Of Kyrandia	£32.95
Chessmaster Pro	£44.95
7th Guest	£54.95
Sherlock Holmes 3	£39.95
WC1 & Ultima 6	£19.95
Great Naval Battles	£32.95
Underworld 1 & 2	£39.95
Monkey Island 1	£39.95
Space Quest 4	£39.95
Return To Zork	£39.95
Ecoquest	£35.95
Day of the Tentacle	£35.95
Laura Bow 2 Amon Ra	£39.95
Dune	£39.95
Kings Quest 6	£39.95
WC2 & Underworld	£39.95
WC1 Deluxe Edition	£29.95

MAIN PRICES EXCLUDE VAT & DELIVERY
BUT FULLY INCLUSIVE PRICES ARE SHOWN !
ANY PRICES OR CONTENTS ARE SUBJECT TO CHANGE WITHOUT NOTICE



PC Review welcomes letters on any subject under the PC sun. The editor will chop them to fit if need be, and we'll assume letters are for publication unless you state otherwise. Send your mail to letters, PC Review, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Star letters win software prizes!

Double trouble

I have a 16MHz 386 PC and use DoubleSpace. Recently, I bought a Sound Blaster card, and have found that many of my games need extra memory for samples, etc.

I tried using a boot disk, but by the time I had installed Emm386 and Himem, the memory had dropped too low again. To get round this, I installed the game on my uncompressed Drive D, and then booted up with an old DOS 5 boot disk, thus not loading DoubleSpace.

This presented me with a directory listing of a few DoubleSpace files and my game, which now worked perfectly, Sound Blaster et al.

A word of warning if you should attempt to do this, however. Do not delete any of the DoubleSpace files, as they contain your entire compressed drive.

I hope this helps some readers out of a tight spot.

P S Gardiner
Falmouth, Cornwall

Role reversal

I think your review on Blade of Destiny was a little unfair. I'm new to role-playing and I find the game quite enjoyable, although I agree it could be dull on the scenery side.

Yesterday I was itching for a fight and went to the Ottaskins place in Thorwell and beat four guards, followed by three guards, followed by three more. In about 15 minutes. I'd cast a horriphobus spell on three of them, and an evil eye on a couple which meant two of them were fighting on my side (and I got lucky in my character generation having two archers).

But then again, maybe I am a better fighter than you (and more intelligent and experienced) being a WOMAN!!!

A criticism I would make is that the fight screens are too small, and worse still, some of the enemy are identical to my own team. How, with a strategy based fighting system like this, can you plan a strate-

gy if you can't tell your own side from the enemy. Now if this isn't silly, what is?

PS: I just set up camp for the night by an inviting looking stream, sent my hunter out for food and water, and guess what? Couldn't find water anywhere!

Michelle Vicary
Edgware, Middlesex



Let me first start by saying that, whilst we try to be as fair as possible, reviews are always subjective in that they reflect the opinions of the reviewer. Cal has played a wide range of role-playing games, and felt that Blade of Destiny was not as good as some of the other games on offer. This does not necessarily mean that no-one will get any enjoyment out of the game, just that it could have been a whole lot better.

Incidentally, Cal herself (pictured, right) would like to point out that she is, was and always will be a woman, unless there's something she isn't telling us, of course.

At cross roles?

Cal Jones' article on the problem with RPGs (Issue 24) was an extremely interesting read, and it contained many points that I agreed with and a few that I didn't.

I enjoy computer RPGs immensely and have been involved in a few over the years as manager, tester and manual writer, but the genre is now at a crossroads where it could begin to lose my enthusiasm.

Computer-based RPGs have stagnated in some areas, especially

when it comes to puzzles. There are far too many games that rely on the lever, button and pressure plate philosophy that first came to the fore when Dungeon Master appeared on the Atari ST.

Puzzles should be part of the plot, but these logic puzzles serve no other purpose than to slow the player's progress. More often than not, they feel out of place in the context of the quest or the story, and the 'role-playing' feel is diminished as a result.

The main reason why most people play the 'real' paper-based RPGs is to enhance their character's abilities and thus improve them (hence the 'role-playing' element). Most of the computer RPGs I've played make the quest the be-all and end-all of the game, and this makes them more closely related to the adventure game genre than the paper-based systems they are trying to emulate!

Personally, I have quickly grown tired of the first person perspective in RPGs. Combat is very clumsy and is nothing more than a hit and miss affair, and the same can be said for spell-casting. The isometric view is a much better perspective and it more closely resembles the miniatures and the floor plans of 'real' paper RPGs. It will be most interesting to see what Origin's Ultima VIII does with it. It's a shame that a lot of people equate a good game with its technological achievements to the point where they believe a game is only worth purchasing if it boasts the Ultima Underworld style environment.

Most of what Cal wrote struck a chord, but I didn't agree with the opinion that the Tolkien-inspired fantasy scenarios have become boring and predictable. It's just that most of them have been handled very badly. However, variety is the spice of life and I agree that a change is as good as a rest. Why not publish some science fiction RPGs instead? West End Games' Star War series (based on the films, comics and recent novels) would be ideal. How about it, LucasArts?

Richard Hewison
Luton, Bedfordshire

Not the real thing

In response to your article, The problem with RPGs, of course they are all the same and quite boring. I've

Star letter Golf club

I have just started the MicroProse Users Golfing Society from an idea I had some time ago for players of MicroProse Golf and wondered if any of your readers would be interested in joining.

I have permission from MicroProse to use their name and they have agreed to donate a trophy for the national winner. It is only open at this stage to scratch players so that everybody competes at one level.

Providing I get enough support, I propose to run a regional competition over 36 holes and the final stage over 72 holes. I am running this on my own at the moment so finances are rather restricted. Any help you can provide would be greatly appreciated.

If you can see your way to printing this letter and ask your readers to send a SAE to me I will send them details of the club and a registration form.

If this venture gets off the ground I will inform you of its progress and credit you at the final stage with any help you care to give. Thank you in anticipation.

Andy Jervis
9, Portland Drive
Nuneaton, Warks



been playing RPGs (the 'proper' ones involving other human beings) for a long time, and I have a bit of a chip on my shoulder with computer games being called RPGs.

The closest thing to a real RPG that a computer can get is multi-user dungeons, something where a human controls each character. But even then you are limited to the functions of the computer. true role-playing is a highly social thing, involving a lot of unhealthy food and drink. A computer RPG involves sitting on your own in a darkened room in front of a screen. Don't get me wrong, I quite enjoy the latter, but it is a different game, not an RPG. Role playing has gathered a greater popularity (and come to think of it, more female gamers), because it has developed beyond hacking your way through dungeons. It doesn't matter if you solve

the puzzle — which you need not do in the one way that the computer will let you — what matters is creating and playing a character, and being involved in the group.

Until the computer finds a way to move beyond dungeons and princesses, computer RPGs will be different graphics, same adventure. One is an intellectual puzzle challenge, the other is a social and imagination challenge. I have played RPGs for about ten years, but was stupendously unimpressed with even Ultima Underworld. If the two media were the same, I would be playing Underworld now rather than writing.

Finally, after reading your article on configuring Windows (PC Review, Issue 25), I have found another trick. Are you bored with the really odd wallpaper available on the desktop? I, for one, cannot

look at Leaves with a hangover. However, you can find a picture that you do like and scan it, saving it as a .BMP file. If you place this file in your Windows directory, it will then be available on the desktop (along with all the other wallpaper).

Andrew Peregrine
Maldon, Essex

Let off with a caution

After buying Twilight 2000 a year ago, I considered buying the extra sound and graphics package from Paragon software to enhance the already great factors of the game.

I find it thoroughly captivating and thought that the extra graphics would really make the game superb. I went to try and get an international order from the bank for \$9.95 and after finding a place that sold them, I phoned America to check the price of the upgrade. To my great annoyance, I found that the company was no longer in business and it was just 'pot luck' that I had not sent off the money order.

I will now be more cautious in the future of getting upgrades and I feel that magazines such as PC Review should inform readers of companies that have either ceased to trade or have been taken over.

James Allen
Dorchester, Dorset

Twilight 2000 and the sound and graphics extras are currently available from Empire, on (081) 343 7337. Paragon, incidentally, hasn't gone out of business — it was acquired by MicroProse last year and now operates as a development team for the company.

A world of its own

One of the most recent and exciting innovations in computer gaming is the ability to play PC games with and against other people who are located in different areas via a modem link.

The result is that playing computer games no longer means solitary confinement.

Most of the latest flight simulations now offer a head to head capability – however, a problem exists in finding adversaries.

This is where we come in. We are the first flight sim ladder to form in this country, and we have made our home on the Transworld BBS in Bristol.

The Transworld BBS Challenge ladder is a special interest forum that brings flight sim enthusiasts together from around the country to discuss and fly PC combat simulations that are capable of using telecommunications technology for play and competition.

At the moment, this is limited to those sims which support a direct modem to modem connection.

So, if you enjoy simulated aerial combat, and you think that you could waste just about anyone in computer airspace, join the Transworld flight sim ladder.

A challenge ladder is a list of players engaged in an ongoing competition. The players are arranged vertically, with the highly ranked players near the top of the "ladder" and new or unranked players joining in at the bottom. As they issue and win challenges, played out via direct modem to modem connection, their position on the ladder moves upwards as they strive to achieve the coveted top spot.

Top Gun Tournaments will be organised from time to time, and there will also be a monthly newsletter informing you of ladder progress, with member editorials, and other news items.

Interested? Good! The sooner we can build a solid membership, the sooner we can put together the tools for a well sponsored, solid ladder.

This is not a profit motivated venture and there are therefore no fees or charges associated with the ladder. If you like computer piloting, contact us on Transworld BBS. Leave a message for Leon Smith.

Telephone Transworld BBS on one of the three data lines and download Ladder.zip on (0272) 739268, 739269, or 739270 for official rules, regulations, and important information. For further information, please contact me at 3 Seymour Rd, Staple Hills, Bristol BS16 4TG.

Leon Smith
Bristol

Multiple solutions wanted

I was interested in the preview of Simon the Sorcerer (PC Review, Issue 22). Despite the naff name, it instantly appealed to me when I read that it avoided the old A to B to C syndrome (ie, using A with B to get C). This is obviously welcome news to veteran graphic adventurers everywhere, who are fed up with games which rely on using only one solution to a problem. Why do some well-established companies (Sierra in particular) insist on feeding us with over-expensive games with such restrictive methods of gameplay? In such games, the player is confronted with puzzles where the program stubbornly tells you that there is only one way to get past the obstacle in front of you and you soon find that any sensible alternative is met with sudden death!

Some of the problem-solving methods are a bit obscure, too. The player, after a solid six hours of infuriated re-loads, says something like, "Gosh, silly me! I should have realised that the dead rainbow trout I'm carrying would have opened that locked door, rather than the three keys and two battering rams in my inventory!"

OK, that's an exaggeration, but you get my point. It's an incredibly annoying problem, which can only be solved by continuous experimentation with the players' inventory — a somewhat dreary task for someone who just shelled out £45-plus for some *fun*.

It's good to see that some companies do address the above problems. LucasArts is a good example. One of the reasons that Monkey Island 2, for instance, is so enjoyable (along with the humour) is that it gives you the freedom to move around three different islands, tackling the puzzles at your own pace. If you get stuck, you don't have to spend hours trying to get past one sticky obstacle. The solutions aren't too far-fetched either and you can sometimes tackle a problem in a different way — all without sudden death. About the same can be said of the more recent Day of the Tentacle: if you can't get Hoagie's Chron-o-John working, you can still try to see to some of Laverne or Bernard's dilemmas.

Another promising software house would have to be Revolution Software. Lure of the Temptress, although too short and too easy, showed what brilliant potential its Virtual Theatre system has, making all the characters go out and lead their own lives while you go about yours. I'm sure many of us are looking forward to Beneath a Steel Sky. Imagine combining all the above plus-points I have mentioned with VT and decent intro and end sequences — you could have the game of the century!

Gordon Wallace
Ayr

Replacement costs

"Why do games cost so much?" is an old question. I have another one for you: why do replacements cost so much?

We are often advised to make copies of the original installation disks, although I don't suppose many of us do, since using decent quality disks, this could add £6-£8 to an already expensive purchase.

A year ago I bought Ultima VII, which has been installed on to my hard disk on several occasions. I only have 40Mb, so something has to go when I get something new.

I recently tried, yet again, to install it and found that the first install disk was now unreadable. So I sent it back for replacement and received a reply from Electronic Arts:

"We are pleased to inform you that

replacements are available. The price is £5.75 per disk to cover material costs and handling ..."

Many games now come on six to eight disks. To replace all the disks in a game at these prices would cost £34.50 to £46, which is, obviously, more than they sell the complete game, including packaging, for to their distributors.

Simon Booth
Manchester

Dreamy disk demos

I noticed in your magazine that companies are now offering free disks to sample certain games. This has raised an interesting point. Why don't most people offer this with new games as it would certainly help us computer owners to see if we can run such software at a reasonable pace. I mention this because on reading a review of Alone in the Dark, I was informed that on anything less than a 33MHz 486 it would be too slow, but on running a demo on my humble 25MHz 386 it seemed to add an almost dreamlike quality to the game and so I bought it.

I was also thinking that if some companies weren't too keen on the idea of freebies, perhaps they could use the old paint advertising gimmick of selling the disk for, say, £2-£3, which would be redeemable against the full game.

Mr I F Perry
Rothwell
Northants

Competition winners Sound Sense (Issue 23)

Beatmark's CD-ROM plus soundboard upgrade package evidently hit many people's wish lists, since this proved to be a hugely popular competition with thousands of entries. Sadly, there could only be one winner, although P Nicholson, of Romsey, Hampshire, won't be too upset, being the proud new owner of the Sound Sense Multimedia Kit.

Also laughing all the way to the keyboard are J Taggart, of Kilwinning, Ayrshire; Alasdair T McClean, of Perth, and Clive Beal, of Horam, East Sussex, who have each won a Sound Sense Entertainment Pack. Happy listening!

The answers to the three set questions were, 1) Julie Andrews (Christopher Plummer was also accepted), 2) decibels, and 3) three games in the Sound Sense Entertainment Pack.

MICROLAND BULLETIN BOARD SYSTEM

0891 990 505
To Download

0483 725 905
To View

Shareware to download at V32bis, V32, V22bis, V22, V23, & HST etc. 8 data bits, no parity.

Why wait for your software when you can download now direct to your computer. Microland offers high speed connections and most files are compressed to minimise the cost. Check it out on 0483 725 905 at normal call charges. So much shareware you are spoilt for choice.

Over 80 file areas including Desktop Publishing, GIF Files, Microsoft Windows, Games, Database Systems, Clip Art, Unix, Virus Detectors, Laser Fonts, Word Processors, Database Apps & Utils, Music Sound Tunes, Spreadsheets, Account & Finance Packages, Mean 18 Golf Courses, and Communications. Area 1 contains file lists for all areas to help you find what you are looking for. Protocols xmodem, ymodem, zmodem, kermit, sealink, and uucp.

Calls to 0891 990 505 charged at 36p per minute cheap rate, 48p per minute all other times.
Trevan Designs Ltd. PO Box 13, Aldershot, Hants. GU12 6YX.



RED DRAGON SHAREWARE

3 Oaklea Court, Rhyll, Clwyd, LL18 4NP
Tel 0745 338094



*Free Catalogue on request *Same day dispatch on orders *Free advice on all computer matters
5.25 Disks £1.60, 3.5 Disks £1.90 Payment by Cheque or Credit Card (Telephone orders accepted)

SPECIAL OFFER PACKS OF 10 IBM DISKS 5.25 @ £12, 3.5 @ £14.00
Each box is a 10 disk pack. Thousands of other disks available for IBM, Atari ST, and Apple Mac
Shareware is not free, please register if you find the program useful

Pack 1 - Art & Graphics Pack

City Desk, Letterhead, PC Illustrator, Mapmaker, DazCad, Draft Choice, Free Press, Painters Apprentice, Print Partner, Graphics Work Station

Pack 2 - VGA Graphics Pack

VGA Paint, Desktop Paint, VGA Demos (2Disks), Split Show Partner Lite (2Disks), Fractint (2 Disks), VGA Cad

Pack 3 - Primary Education Pack

Word Processing for Kids, ABC Funkeys, Amy's 1st Primer, School Mom, Teachbot, BabyMath, Punnels & Buckets, Word Gallery, MathShop, SpellBound, Talking Teacher

Pack 4 - VGA Games Pack

Crystal Caves, Mahjong, Bazaaroid, Shooting Gallery, Jigsaw, Concentration, Caves of Thor, Captain Comic, Commander Keen, Duke Nukem

Pack 5 - Windows 3 Games Pack

Pack of 10 Disks with 35+ Games inc. Chess, Backgammon, Xword, Checkers, Cubic, Hextris, Brick, WinPoker, Gravity, Taipei, etc.

Pack 6 - Adult Pack

10 Disks of Miscellaneous Programs for the over 18's only. Mixture of Pinups, Animations, and Adult Games

SPECIAL OFFER FOR 3.5" HIGH DENSITY DISK USERS

Packs 1 + 2 + 3 + 4 as described above put onto 10 High Density disks for only £20.

Yes, that's 40 disks of software put onto 10 HD disks for the great price of £20 !!!!

No catch, just great value at only 50p per disk.

**This space could be
YOURS!!**

**To advertise in PC Review
Call : 071 972 6700**

The Gates of the Underworld Bulletin Board System

View area

081-845-5003

Download area:

0891-318 412

0891-318-414

Take software directly down from the system, no waiting for the post, no stamps and envelopes needed, you get the software there and then, have a look at normal charge rate on **081 813-5003**, Take down the file list at normal rates, Subscription Available.

Gig upon Gig of Software, Message base, PC Shop, Swap Shop, On-line Help, Full Sysop Support & voice support available.

We have areas from, DTP, gif, Hobby's, Spreadsheets, Windows, OS/2, Games, Game Help, Hints Tips & Cheats, Sega, Nintendo, Amiga, Comms, Accounts, Music, Golf, D/base, and too much more to mention.

Modem Speeds V22, V23, HST, Etc...

All calls on 0891, charged at 36p, min cheap & 48p min all other times.

Home Grown Productions Ltd. PO Box 193, Hayes, Middlesex



*Cheques
payable to
PC Action*

**FLIGHTSTICK PRO
& FLIGHT SIM. V**

£94.95 INC. V.A.T. & DELIVERY



PC ACTION



SOUTH

**27 HOUNSLOW ROAD
WHITTON
TWICKENHAM
TW2 7BZ**

NORTH

**PO BOX 39
LIVINGSTON
WEST LOTHIAN
EH54 9EW**

081 893 3630 0506 461600

CH PRODUCTS FLIGHTSTICK PRO

All the features of the No. 1 selling CH Flightstick
7ft cable, throttle control & trim controls
Plus

Four fire buttons, Four way cooly hat controller
Microsoft Flight Simulator drivers X-Wing, F15 III, Privateer
Existing software base -
Strike Commander, Tornado, Falcon 3.02 & Mig 29

£69.95 INC. V.A.T. & DELIVERY



BACK ISSUES

If you're missing any of PC Review's previous editions, you can order them from PC Review, Back Issues Dept, Tower Publishing, Tower House, Sovereign Park, Laphkill St, Market Harborough, Leics, LE16 9EF. Issues 1-11 inclusive cost £3.95 each; Issues 12-25 cost £4.95 each. If you're ordering from outside the UK, the price is £5.95 per issue.

Issue 1
SOLD OUT

Issue 2
SOLD OUT

Issue 3
PC buyers's guide; Monkey Island 2. On disk: Oh No! More Lemmings.
5.25" disk edition sold out

Issue 4
Viruses, EOTB 2, Chessmaster 3000. On disk: Fingerprint.
3.5" disk edition sold out

Issue 5
CD-ROM and multimedia, Midwinter II. On disk: Supaplex.
5.25" disk edition sold out

Issue 6
Windows, chess programs, Star Trek. On disk: Darkseed, Blox.
5.25" disk edition sold out

Issue 7
Flight sims, Another World. On disk: Another World, Timelord.
3.5" disk edition sold out

Issue 8
Ultima Underworld, tips supplement. On disk: European Soccer, Treacles Utilities.
3.5" disk edition sold out

Issue 9
Head to head games, Ultima VII. On disk: Magic Pockets, Cool Croc Twins.
3.5" disk edition sold out

Issue 10
Music on the PC, Sid Meier. On disk: Sports Challenge, Jill of the Jungle.
3.5" disk edition sold out

Issue 11
Hints and tips for the PC, Indy IV. On disk: Shadowlands, Campaign.
3.5" disk edition sold out

Issue 12
30 best role-playing games, printers. On disk: World Tennis Champs.
3.5" disk edition sold out

Issue 13
Golf games, soundboards; Sherlock Holmes reviewed. On disk: KGB.
3.5" disk edition sold out

Issue 14
CD-ROM games; Alone in the Dark, ATAC. On disk: Wizkid, PrintPartner.
3.5" disk edition sold out

Issue 15
1993 preview, F1Grand Prix reviewed. On disk: Populous II plus six games.
3.5" disk edition sold out

Issue 16
Adventures; F-15 III, Dune 2 reviewed. On disk: Mandelbrot Magic, Flip-It.
3.5" disk edition sold out

Issue 17
Motor racing games; Harrier, Stunt Island reviewed. On disk: Tornado.
3.5" disk edition sold out

Issue 18
MS-DOS 6; Ultima Underworld 2 reviewed. On disk: Contraptions.

Issue 19
Flight Sim 4, screen savers, viruses; X-Wing, Lemmings 2, SQ5, reviewed. On disk: Print Shop Deluxe, Sleepwalker (3.5"), Contraptions (5.25").

Issue 20
Graphics packages, hard disk compression; 7th Guest, Strike Commander reviewed. On disk: Sensible Soccer, Return of the Phantom (3.5" only)
5.25" disk edition sold out

Issue 21
Football games, hand scanners, CD-ROM drives; Syndicate, Prince of Persia 2 reviewed. On disk: Prince of Persia 2 (3.5"), Battle Isle 93.

Issue 22
CES games preview, war games, anti-virus software; Tornado, Sensi, Flashback reviewed. On disk: Air Warrior (3.5"), Ambush at Sorinor.

Issue 23
Flight sims, processors, data recovery; Tentacle, Imperial Pursuit, Fields of Glory reviewed. On disk: Lost Vikings, Incredible Machine 2 (both 3.5").

Issue 24
Take your PC apart, 3D Ultrasound, CD-ROM plans, Windows tips, Alone in the Dark 2 preview; Lands of Lore, Simon the Sorcerer reviewed. On disk: Troddlers (3.5"), Body Blows.

Issue 25
Reelmagic card, Top 100 Games 1993, Microsoft developments; TFX, Jurassic Park, Streetfighter II reviewed. On disk: Starlord, Ancients: Deathwatch.

PCreview BACK ISSUES

Please send me the following back issue(s) of PC Review:

.....(write the issue number(s) here)

with 5.25" ☐ 3.5" ☐ cover disk

I enclose a cheque ☐ postal order ☐ made payable to EMAP Images for £.....

(UK rates: £3.95 per magazine Issues 1-11, £4.95 per magazine Issues 12-25; overseas rates:

£5.95 per magazine — all issues)

My Mastercard ☐ Visa ☐ Amex ☐ Diners Club ☐ card number is

Expiry date

Name.....

Address.....

Send this coupon and payment (if applicable) to: PC Review, Back Issues Department, Tower Publishing, Tower House, Sovereign Park, Laphkill St, Market Harborough, Leics, LE16 9EF

SUBSCRIBE TO PC REVIEW

Microprose is well known for state of the art, high quality flight simulators. However, it should be remembered that they have also published some fantastic games from other genres.

MICROPROSE™
SIMULATION • SOFTWARE

PC Review highly recommends Microprose software and is pleased to offer one of the following brilliant releases **FREE** - or a top value deal on Formula One Grand Prix - when you subscribe to PC Review!

◆ Subscribing to PC Review guarantees delivery to your door of the next 12 issues of Europe's premier PC entertainment guide.

◆ By subscribing to PC Review you can be sure of priority access to essential reviews, previews, features and news stories each month.

◆ Over your next 12 issues we'll be working hard to deliver you the very best in playable demos and shareware.

◆ With our unique editorial mix, you can access our comprehensive reference section and shareware/public domain catalogues.

◆ Subscribe to PC Review and be confident of receiving the **ONLY** authoritative guide to PC entertainment and much more.

◆ For only £40.00 you will receive 12 issues with cover disk on the format of your choice and your subscription gift - either your **FREE** game or an exceptionally cheaply priced copy of Formula One Grand Prix.

FORMULA ONE GRAND PRIX

only £5.00

Have you ever wondered what it would be like to be one of those 26 Grand Prix racing car drivers? Now is your chance to find out with one of the best race game simulations ever - and PC Review bring it to you for only £5.00!! Each car handles



just like the real thing, you can adjust gears, brakes and wings to maximise speed. Experience 16 international Grand Prix tracks in stunning 3D. An amazing simulation and yours for a rubber burning £5.00.

N.B: Please note that you can order Formula One Grand Prix for an additional £5.00 on top of the subscription fee - but you cannot also choose a free game. Choosing to order Formula One Grand Prix counts as your subscription incentive.

F117A

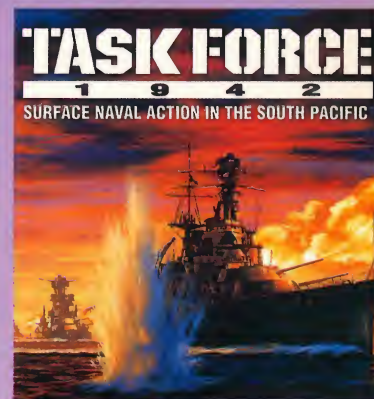
This is the only simulator that could improve on the land-mark combat flight simulator F19 Stealth Fighter.



The same superior game play and design but with much more: true to life new graphics, sound that seems to wrap around you, more worlds to conquer and more scenarios to challenge you.

TASKFORCE 1942

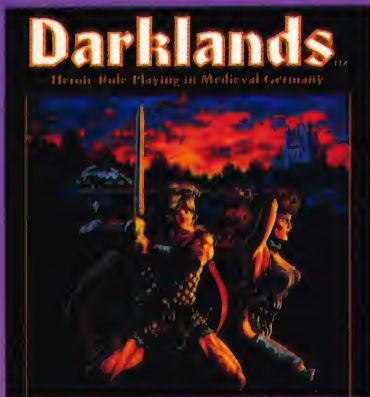
A long lance torpedo rips through the hulk of your flagship. Huge columns of water from enemy gunfire surround your battleship. It's just another day in Task Force 1942. Extensively researched and historically



accurate, this three dimensional game sets new standards in the simulation of warfare at sea.

DARKLANDS

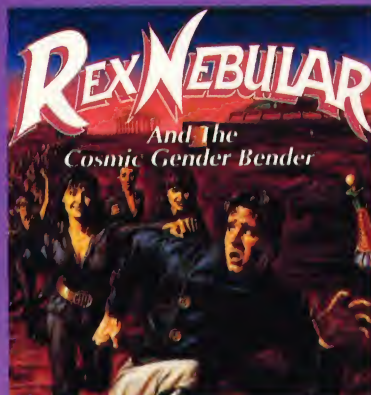
Darklands is the first realistic fantasy role-playing game.



By leading a band of adventurers across the sinister lands of 15th century Germany, you'll encounter the real Middle Ages - steeped in fear, myth and legend. Travel hundreds of miles, visit over 90 cities and watch savage battles unfold before your eyes.

REX NEBULAR AND THE COSMIC GENDER BENDER

Rex has a problem. His space limo is on a crash course for Terra Androgena - a planet that apparently

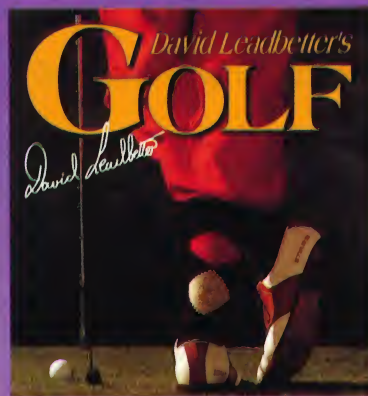


does not exist.... Rex seeks a price-less goal, but will he survive the journey? And how will he handle the natives? Can you lend Rex a hand to cope with the numerous demands made on him?

DAVID LEADBETTER'S GOLF

Why go through a box of golf balls every time you hit the course? Improve your game with David Leadbetter's golf. Let the instructor who

helped Nick Faldo and Seve Ballesteros become champions help you swing your way to the leader board. With these tournament tested tips, hints and



strategies, you'll raise your golfing skills to new heights as you bring your scores to new lows.

HOW TO PLACE YOUR SUBSCRIPTION

Place your order by completing the coupon (clear photo-copies are acceptable) or send your details on a post-card, or ring our special 24 hour order line on 0858 410 888 and quote your credit card number. When ordering your subscription, please remember to tell us which size cover disk you prefer - 3.5" or 5.25".

SUBS GUARANTEE

If you aren't completely satisfied with your subscription, you may cancel at any time and receive a prompt refund for all unmailed copies.

Your software choice is mailed separately to your first magazine. Please allow 28 days for delivery. We reserve the right to provide you with an alternative game should your choice become unavailable. Free software is ONLY available to UK residents. We advise overseas subscribers to pay by international money order.

Offer closing date: 14th October 1993

S U B S U M M A R Y		
12 issues	UK Residents, BFPO	£40.00
12 issues	Europe, Eire - Air Mail	£48.00
12 issues	Rest of World - zone (1)	£58.00
12 issues	Rest of World - zone (2)	£58.00
12 issues	Rest of World - surface	£47.00

ORDER FORM

Please send to PC Review Subscriptions Dept, PO Box 500, Leicester, LE99 0AA (please make all cheques/postal orders payable to EMAP Images Ltd.)

Name

Address

Post Code..... Tel

I would like a subscription for 12 issues of PC Review, please start my subscription from theissue (please enter month).

I would like to receive my cover disk on the following format size ☐ 3.5" ☐ 5.25" (please tick one box)

I would like the following subscription incentive:

Formula One Grand Prix
(enclose additional £5.00)

☐ 3.5" ☐ 5.25"

source code 0136M

Rex Nebular & The Cosmic Gender Bender

☐ 3.5" ☐ 5.25"

source code 0131Q

David Leadbetter's Golf

☐ 3.5" ☐ 5.25"

source code 0132U

Task Force 1942

☐ 3.5" ☐ 5.25"

source code 0133Y

F117A

☐ 3.5" ☐ 5.25"

source code 0134D

Darklands

☐ 3.5" ☐ 5.25"

source code 0135H

Please remember, we reserve the right to provide you with an alternative game should your choice become unavailable.

I enclose a cheque/postal order (payable to EMAP Images Ltd) for £..... Please charge £.....to my Access/VISA Card (please delete

Card Number..... Expiry Date.....

Signature :

Fulfilment and enquiries : Alan Wells International, Memberline House, Farndon Road, Market Harborough, Leicester LE15 9NR.

Classic space games

Space is now a fairly cluttered frontier, with a multitude of games offering space combat, trading and alien encounters. But which do you choose?

Dean Evans dutifully grabs his towel and hitches a lift across the universe

Space: the final frontier ... it seems that this famous phrase has fired and captured our imaginations for generations. Although it hasn't encouraged people to wear short, bell-bottom trousers, thanks to Star Trek there are now nations of people who know about Tricorders, warp drives and teleportation; people who are perfectly comfortable with the idea of savagely angular haircuts, strange new worlds and pointy alien ears. The point is simply this: science fiction and, more importantly, space, sells.

Space and sci-fi have been hugely popular ever since the pulp comics of the late 1920s where titles like Astounding SF and Amazing regularly spun tales of daring adventure and stories of alien invasions to an eager cult readership.

With the advent of the home computer age, these tales of alien invasion were cut, simplified and transferred to the coin-op and monitor screen to become arcade shoot 'em up games like Space Invaders, Galaxians, Defender and Star Raiders on the Atari VCS.

Ever since Star Wars and 2001, the idea of outer space has been enormously popular and games set in outer space have been equally pop-

ular as a result. Unlike a film, for example, a space game on a computer 'involves' the player and unlike a flight sim, the space game (or space sim) isn't obliged to give even the smallest nod of recognition to realism.

Like sci-fi books, games such as Wing Commander and X-Wing offer escapism and a flight sim type experience that ignores the restrictions imposed by earth-bound reality such as G-Forces, wave drag and the ground.

In space, you can easily move in three dimensions and since there's no gravity, you can quickly speed up, slow down and hover without running the risk of breaking any fundamental physical laws whatsoever. It's generally fast, fun and you don't need a 200-page flight manual to get it up and playing.

But like the world builder and the RPG, the space genre is a relative newcomer to the PC computer market. Two dimensional space shoot 'em ups (who can forget good old Space Invaders?) did solid business for years, but continually failed to do anything strikingly new or original. But, and this is a huge, bold sort of 'but', everything radically changed with the arrival of David Braben and Elite on the BBC Micro.

Elite introduced and popularised the 3D aspect of the space game, investing it with a new fictional realism. As such, 3D combat games became big business overnight and, despite competition from almost every corner, Elite fought off all imitators and hopeful bandwagon jumpers. Simply put, Elite was *the* space game to have on your PC.

But times change and Wing Commander appeared in 1991 revolutionising the stumbling 3D space genre once again. Using scalable bitmaps, Gouraud shading and cinematic sequences, Wing Commander brought a whole new visual realism to the genre. Although with the benefit of hindsight, it is really nothing more than a good-looking 3D shoot 'em up, with it's strikingly new graphics and ongoing narrative Wing Commander was a mould breaker.

Unfortunately, after the high profile Wing Commander, the genre descended into a rut with a batch of disappointing games that included Mantis XF5700 Experimental Fighter, Lightspeed, Epic – even Wing Commander 2 failed to improve on the original.

On the plus side, X-Wing from LucasArts saw a long-awaited return to the Star Wars universe.

Trading, big guns and fast 3D



Elite Plus. When Elite originally appeared on the BBC Micro, it boasted revolutionary 3D wire-frame graphics, trading, thousands of planets, seven galaxies, police, pirates and even a few missions. All this was somehow squashed into a tiny, minute 32K (5% of your PC's 640K base memory) on the BBC Micro, and on PC, although the visuals had been completely revamped, the gameplay has remained exactly the same.



The Wing Commander series of games are without doubt the most popular titles on the market. The original game combined dogfighting action with highly realistic graphics and has so far spawned WC2, two add-on disks, Wing Commander Academy and Privateer. Its distinctive style (cinematic sequences, bitmaps, etc) is unmatched, although the actual gameplay is a tad simplistic by today's standards.



Although less handsome than Wing Commander, X-Wing has taken the genre by storm. High on atmosphere (it has three Star Wars films to draw upon) X-Wing scores over its rivals thanks to superb playability. Flying an X-Wing, Y-Wing and A-Wing against the Empire, LucasArts has recreated the excitement of the movie, enabling you to fight your way to the Death Star and fly down that famous trench.

Despite its basic and often crude polygonal graphics, it offered superb gameplay and familiar atmosphere, so that X-Wing was, and indeed still is, the space combat sim to beat.

Also worthy of a mention is Interplay's Star Trek 25th Anniversary, a graphic adventure that brilliantly captures the mood of the TV series. Switching between Kirk, Bones, Spock, Scotty, et al, you must solve seven episodes, using any Star Trek knowledge you've picked up over the years. Finally, there is Star Control, a game that proves that the old 2D format is far from dead.

So what of the future? Well, I'm increasingly of the opinion that in the space genre the focus is on developing evermore sophisticated graphics while failing to improve the gameplay. Privateer (reviewed on page 74) is a prime example. Here is a game that looks great from the screenshots on the pack, but frankly there isn't much of a game underneath.

Nonetheless, after Wing Commander, X-Wing and Frontier: Elite 2, the future of the genre actually looks reasonably rosy. The forthcoming Starlord from MicroProse (reviewed next issue) promises to combine both a complex strategic challenge and fast three dimensional combat action, TIE Fighter and Rebel Assault from LucasArts will continue to milk the Star Wars licence, DID is to follow up TFX with its eagerly awaited space game, Inferno, and Spectrum Holobyte is going to leap into the fray with Star Trek: The Next Generation on CD-ROM.

Hopefully, we will see games in space get even bigger in the future with both graphics and gameplay improving to include Super VGA, padlock views, variable plot lines, better AI and digitised video footage. Remember, if the space game makes as much progress as the flight simulation has in the past year, the final frontier will become very exciting indeed.



And the future? Well, ideally a game should have a huge playing area, Gouraud shading, texture-mapping, fast 3D polygons, external views, planets to fly across and of course frantic, fast gameplay coming out of its ears. It looks as if Inferno from DID might just have all these things and more, and if it's half as good as TFX is, then I think it's going to be something really special indeed.

Glossary

Aliens

Space would be pretty dull without the odd pushy, militaristic alien race hell-bent on destroying humanity. Whether it's the Kilrathi, the Empire or, that old foe, the Klingons, they're all after the space gamer's head.

Credits

The credit (a term originating in sci-fi literature) is the accepted form of galactic currency throughout most space trading games.

Cinematic sequences (cutscenes)

These Wing Commander sequences showed men running to their ships, landing and launch sequences and enabled you to chat casually to other pilots in the bar.

Deflection shooting

Space combat is often akin to World War II air combat and tactics such as deflection shooting (aiming slightly in front of your target) work equally well.

ECM

Electronic Counter Measures. When there is a missile flying around in space, switching on your trusty ECM will either destroy it or divert it away from your ship.

Hyperspace

Travelling the huge distances between stars is achieved by using Hyperspace. When a starship exceeds the speed of light, it rips open a hole in natural space, enters Hyperspace (a place where time and distance are ignored) and then rips open another hole to get to its destination. There are numerous sci-fi variations on this method: hyperspatial corridors, light speed travel, space bending, warp drives, and so on.

Jumps

See Hyperspace.

Lightspeed

Velocity attained when a starship equals the speed of light photons.

Light year

The distances between stars are measured in light years, ie, the distance light travels in a year. For example, Earth's nearest star (bar our own sun) is Alpha Centauri which is four light years away. If a ship travelled at the speed of light it would take approximately four years to get there.

Missiles

As in modern air combat, the missile is a highly effective offensive weapon and fictional armouries may include nuclear weapons, fire-and-forget missiles, infra-red heatseekers and proton torpedoes.

Tractor beam

A futuristic grappling hook. The tractor beam is a ray of light (normally green, don't ask me why) that it used to capture cargo canisters, ejected pilots and even other starships.

Scalable bitmaps

Used principally in Wing Commander, the bitmap affords the programmer a higher degree of detail. A scalable bitmap can be smoothly enlarged or reduced to give the impression of depth and 3D movement.

Shields

Shields are energy barriers that starships raise to counter laser fire. Most ships have four; front, back, left and right.

Space Invaders

The game that started it all. Using your mobile cannon, you can move left and right to stop ranks of alien invaders reaching the bottom of the screen. Simple but addictive.

Space sim

A serious space game; a game that intends to be as realistic as a fictional game can.

Trading

Elite began the trend for space trading, starting you off with a basic ship which you had to equip with bigger and better weapons using the profits from your trading ventures. Now this trading element is practically everywhere, despite the fact that it is really only a blatant longevity booster for any game.

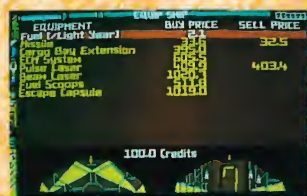
Weapons

As the laser is the main weapon, space games have a combat quality akin to World War Two flight sims like Aces over the Pacific. Other notable guns are: the mass driver cannon, ion cannon, particle accelerator, phaser and the big plasma gun.

Wing people

In space games, you usually go up against incredible odds all by yourself. In Wing Commander and X-Wing, however, you can fly with a wingman that you can order to attack, patrol or help you save your own skin.

Classic space games



Elite Plus

Title	Publisher	Contact	PCR rating
Elite Plus	Empire	(081) 343 7337	-

(Space Legends) Disk £34.99

With a sparsely equipped cobra spaceship, you must trade your way from 'harmless' to 'elite'. In a fully working universe, indulge in piracy, mining and bounty hunting across seven galaxies, the choice is yours. Elite Plus was the best space game around for years.



Frontier: Elite 2

Frontier: Elite II	Gametek	(0753) 553445	9
---------------------------	----------------	----------------------	----------

Disk £39.99

As the grandson of the original Elite pilot, you must again make a fortune in anyway you see fit. Five years in the making, Frontier is bigger, better, features more ships, missions, more everything, in fact. With its Gouraud shaded graphics, Frontier is destined to be a classic.



Hyperspeed

Hyperspeed	MicroProse	(0454) 326532	7
-------------------	-------------------	----------------------	----------

Disk £44.99

Hyperspeed aimed to be MicroProse's answer to Elite. However, the combat is a little tough to get to grips with and there isn't the overwhelming feeling of freedom that you get with Elite.



Buzz Aldrin's Race Into Space

Buzz Aldrin's Race Into Space	EA/Interplay	(0753) 549442	6
--------------------------------------	---------------------	----------------------	----------

Buzz Aldrin's Race Into Space has no 3D combat sequences, no trading, no mining and there isn't the slightest trace of a gun anywhere. You take control of either the Russian or the American space programme and must balance budgets and invest in new technology to beat the other side in the space race.



Star Trek

Star Trek 25th Anniversary	EA/Interplay	(0753) 549442	7
-----------------------------------	---------------------	----------------------	----------

Disk £39.99

Seven missions, the USS Enterprise, Scotty, Bones, Kirk, Spock and the gang are all here in this brilliant graphic adventure from Interplay. Drawing heavily on the look and feel of the cult TV series, Star Trek 25th Anniversary forces you to use your Star Trek knowledge to win battles against the Klingons and save the day.

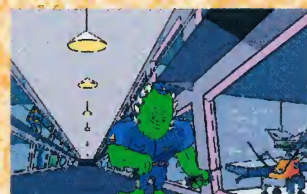


Wing Commander

Wing Commander	Empire	(081) 343 7337	-
-----------------------	---------------	-----------------------	----------

(Space Legends) Disk £34.99

The original, and for my money still the best, of the Wing Commander series enrolls you as a hotshot Terran pilot on the TCS Tigers Claw battleship. With influences such as Star Wars and Battlestar Galactica, Wing Commander is a shoot 'em up par excellence. To the tune of a superb stereo soundtrack, you fight the Kilrathi and win the war in glorious texture-mapped 3D.



Carmen Sandiego

Where in Space is Carmen Sandiego	EA	(0753) 549442	7
--	-----------	----------------------	----------

Disk £39.99

Space travel needn't involve guns. This time you're a galactic detective, tracking down the notorious Carmen Sandiego and her band of evil villains who have been stealing galactic landmarks. Follow the clues from Saturn to Halley's Comet, learning about the planets as you go. Classic edutainment for the children.



X-Wing

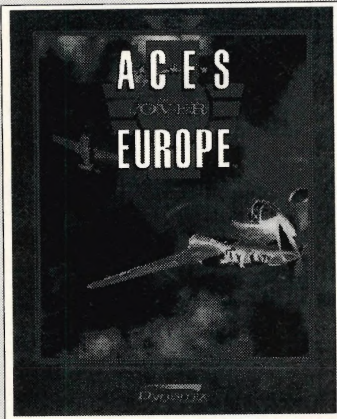
X-Wing	US Gold	(021) 625 3366	8
---------------	----------------	-----------------------	----------

Disk £45.99

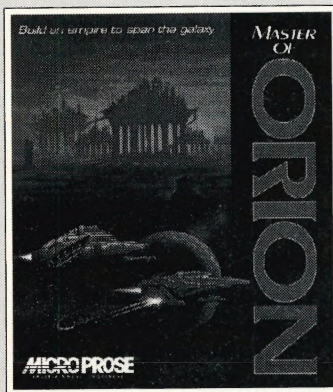
Probably the most atmospheric space game around. Fly three tours of duty in the Star Wars universe, protect transports, attack star destroyers and fly the famous Death Star trench scene. Difficult, fun and superb.

Prices quoted are recommended retail prices; you may find the older products discounted in the shops.

No.1 for PC Games



Aces over Europe



Master of Orion

Strategic Plus Software

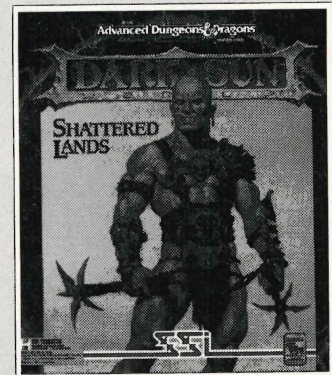
FAST & FRIENDLY MAIL ORDER

081 977 8088

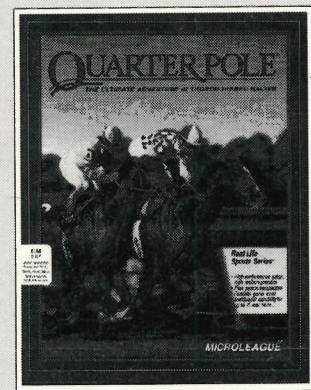
VISIT OUR SHOP AT:

28 D&E The Courtyard
High Street, Hampton Hill
Middlesex. TW12 1PD
Fax: 081 977 4822

Overseas Enquiries Welcome
All Major Credit Cards Accepted



**Dark Sun
Shattered Lands**



Quarter Pole

We specialise in
**Flight Simulations
- Strategy -
Sports Simulations
Role Playing
- Wargames -
Adventures**
**LATEST U.S.A.
RELEASES**

Shadow Caster £39.99
Starlord £call
War in Russia 2 £39.99
Terminator RAMPAGE!! £call
Rules of Engagement II £39.99
Elite II (Frontier) £call
Master of Orion (Microprose) £39.99
Subwars 2250 £call
Stronghold £33.99
Warlords 2 £39.99
Fantasy Empire £call
B-Wing £call
Mad Dog McCree CD £39.99
Rebel Assault (Star Wars) CD £call

Front Page Sports Football PRO £34.99
Gold - Juno - Sword (V4V) £36.99
Tom Landry Football Deluxe £35.99
Privateer + Speech pack SPECIAL £55.99
Kingmaker £call
Dark Suns (SSI) £39.99
Links 386 Pebble Beach £22.99
Return to Zork CD & Disc £call
Aces over Europe (we hope) £39.99
Flight Simulator V5 £35.99
Paris & New York & Washington (FSV) £call
San Francisco (FSV) (Just IN !) £32.99
Third Reich (Avolon Hill) £call
Indy Car Racer £call

IN THE PIPELINE

Receive a further 10% discount on ALL advanced orders. PLUS priority despatch SEE CATALOGUE FOR FURTHER DETAILS

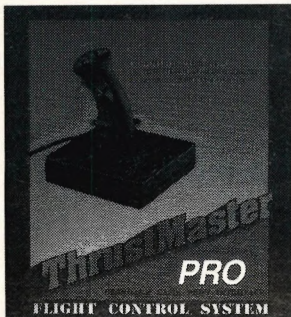
**NEW ACM game card & Rudder Pedals
NOW IN STOCK**



New + New + New + New

**Weapons
Control II**

Call - Call - Call - Call



The Best Combat
Flight Controls
Around!!!
New Heavy Duty
Construction
Experience
Total Control with
THRUSTMASTER PRO
AND
THE WEAPONS
CONTROL SYSTEM
£CALL



Sound Blaster Pro Standard £call!!!

Sound Blaster II £call!!!

CD New Titles Now In Stock call!!!

BOOKS All major clue and strategy books stocked call!!!

New 10th Edition Catalogue
Send £1.50 for our 60+ page catalogue

Name

Address

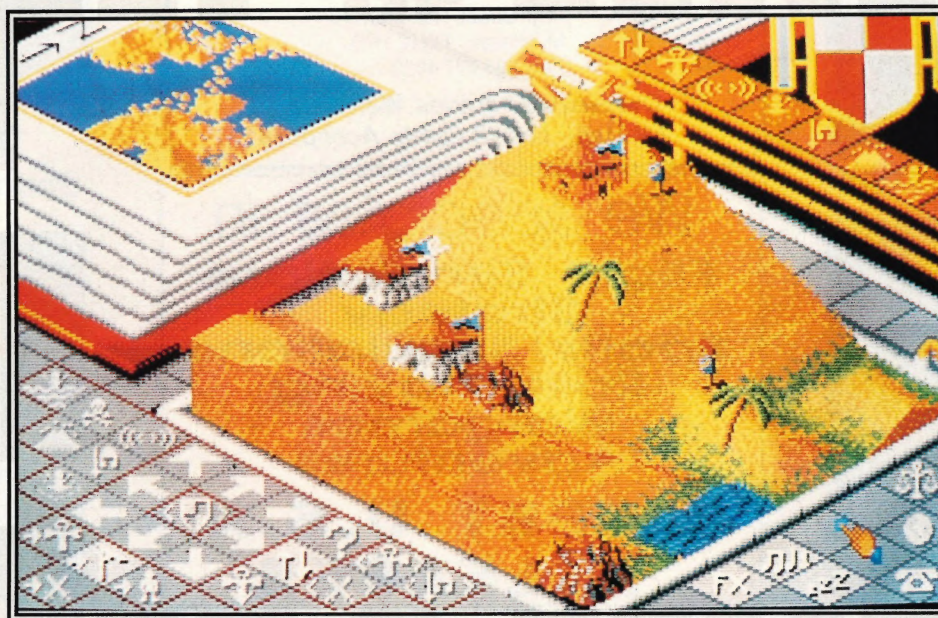
Country

Postcode

Send to: Strategic Plus Software - 28D The Courtyard, High St,
Hampton Hill, Middlesex. TW12 1PD

PCR1293

David Braben's *Classic game of the month*



Populous



"I enjoyed Populous because it was so different to all the other games around at the time — it was

like playing a new game rather than a variation of a previous game. It was delightfully simple, yet great fun to play — you could play it without having to plough through any manuals."

Many grand claims have been made for Populous over the years: that it was responsible for pioneering a brand new gaming genre, the 'God sim', or world builder; that it is the game converted to the most computer and console formats, and an enduring international best seller. Fortunately, for the hype merchants and the designer, Bullfrog Productions, the claims are true.

Both Populous's presentation and play were highly novel. The game took place on a raised square, set diagonally on screen with the player viewing the action as a low-flying bird to one side. This isometric viewpoint quickly spawned a rush of similar-looking games: Mega-lo-Mania, Utopia, Bullfrog's own Powermonger ...

Rather than controlling your characters on-screen directly, in Populous, you manipulate their environment to help the communities thrive. You have the power to change the weather, the terrain, and even strike your people with disaster — your very own 'acts of God'. The current sequel, Populous II, offers a larger playing area and more game features.

PROFILE

David Braben shot to prominence back in 1984, when he and Ian Bell together created Elite, a space trading and strategy game which ran on the BBC B micro and was way, way ahead of its time. Alongside the Pacmans and Defender clones, Elite's wire-frame graphics and depth of gameplay were outstanding. Many BBC Bs were sold in order to play Elite and the game was also a massive hit on other formats, even the belated Elite Plus on the PC.

Braben celebrated this success by writing the first Acorn Archimedes game, Zarch, and settling down to concoct the sequel to Elite. That was eight years ago. Frontier: Elite II has been 'nearly there' for close on a year now, suffering contractual difficulties with publishers, but finally sees the light of day this month.

AN IMPORTANT ENJOYMENT GUARANTEE FROM SIERRA®

WE KNOW THAT SIERRA/DYNAMIX GAMES ARE
SO MUCH FUN THAT WE ARE PREPARED TO
GUARANTEE YOUR ENJOYMENT (See conditions below)



SIERRA PC TOP TEN

Title	Price
1. ACES OVER EUROPE	£44.99
2. BETRAYAL AT KRONDOR	£44.99
3. SPACE QUEST V	£39.99
4. FREDDY PHARKAS	£39.99
5. KINGS QUEST VI	£44.99
6. ACES OF THE PACIFIC	£39.99
7. INCREDIBLE MACHINE	£39.99
8. FPS: FOOTBALL	£39.99
9. LAURA BOW II	£39.99
10. RED BARON	£39.99



IF YOU DON'T ENJOY ANY OF OUR GAMES WE'LL EXCHANGE THEM!
CALL OUR CUSTOMER SERVICE FOR MORE DETAILS: **0734 303171**



CONDITIONS

1. OFFER ENDS 31ST DECEMBER 1993
2. ONLY ONE EXCHANGE PER PERSON PER HOUSEHOLD
3. PRODUCT MUST BE RETURNED IN "AS NEW" CONDITION (OR YOU COULD BE CHARGED FOR NEW COMPONENTS)
4. PRODUCT MUST BE ACCOMPANIED BY RECEIPT AND COUPON WITHIN 21 DAYS OF PURCHASE
5. APPLIES ONLY TO PRODUCT PURCHASED IN UK MADE BY SIERRA/DYNAMIX
6. THIS OFFER DOES NOT AFFECT YOUR STATUTORY RIGHTS

HINTLINE

0336 417410

CALLS COST 36P PER MINUTE CHEAP RATE & 48P PER MINUTE AT ALL OTHER TIMES.
MAXIMUM PERMITTED CHARGE PER CALL FOR MULTIPLE HINTS, £2.70 CHEAP RATE,
£3.50 ALL OTHER TIMES. UNDER 18'S - PLEASE ASK FOR PERMISSION BEFORE CALLING.



COUPON

NAME.....

ADDRESS.....

.....POSTCODE.....

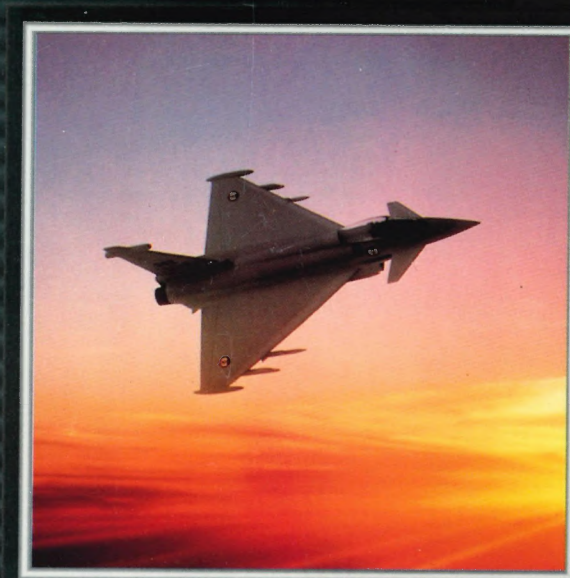
TELEPHONE NO.....

TITLE RETURNED.....

TITLE REQUESTED.....

Return to: Sierra On-Line, Unit 2, Technology Centre, Station Road, Theale, Reading RG7 4AA
Don't forget your receipt!

TFX



"It's more than a straight flight sim., D.I.D. have emulated multi-million dollar flight simulators. When you play TFX the first thing that hits you is the detail of the landscape... over seven million square km appears on screen, with hills, roads and mountains all in the right place." THE EDGE

"The graphic detail is quite superb, with stunning visuals and strong sense of image, TFX is quite often like watching a movie... when I first saw TFX my jaw dropped so far it took me 15 minutes to find it again! It's fast, good looking and fun." PC REVIEW



Tactical Fighter Experiment... the only choice worth making where state of the art flight simulation is concerned.

Take control of one of three of the finest aircraft money can buy:

- Eurofighter 2000
- Lockhead F-22
- Lockhead F-117 Stealth Fighter

TFX... a simulation at the cutting edge of aerial combat enhanced by unprecedented in-depth research and authentic flight detail.

Take on the missions... fight for peace.

PC & COMPATIBLES

PC CD-ROM

AMIGA 1200

CD32

DIGITAL IMAGE DESIGN

ocean[®]

DIGITAL IMAGE DESIGN

OCEAN SOFTWARE LIMITED · 2 CASTLE STREET · CASTLEFIELD · MANCHESTER · M3 4LZ · TELEPHONE: 061 832 6633 · FAX: 061 834 0650